

ALBERTA

DEPT. OF
PUBLIC
WORKS

ANNUAL
REPORT

1912-14

GOV
DOC
CA2
AL
PU
A56
1912-1914

GOV PUB

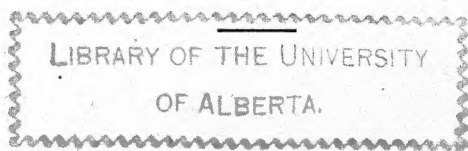
Ex LIBRIS
UNIVERSITATIS
ALBERTAENSIS



Universal Bindery Ltd.
BOOKBINDING - GOLD LETTERING
Edmonton, Alberta

ANNUAL REPORT
OF THE
DEPARTMENT OF PUBLIC WORKS
OF THE
PROVINCE OF ALBERTA
1912

PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY



EDMONTON:
PRINTED BY J. W. JEFFREY, GOVERNMENT PRINTER
1913

ANNUAL REPORT

DEPARTMENT OF PUBLIC WORKS

UNIVERSITY
OF ALBERTA LIBRARY

EDMONTON, February 21st, 1913.

To His Honour

GEORGE HEDLEY VICARS BULYEA,

Lieutenant Governor of the Province of Alberta.

SIR:—I have the honour to transmit herewith the Annual Report of the Department of Public Works from January 1st to December 31st, 1912.

I have the honour to be, Sir,

Your obedient Servant,

C. R. MITCHELL,

Minister of Public Works.

13220

CONTENTS

	Page.
Report of Deputy Minister.....	7
Bridges	11
Ferries	20
Ordinary Roads	21
Trunk Roads	33
Architectural Branch	37
Building Construction	38
Surveys Branch	40
Coal Mines Branch	60
Steam Boilers Branch	153
Correspondence Branch	227

REPORT

OF THE

DEPUTY MINISTER OF PUBLIC WORKS

HON. C. R. MITCHELL, M.P.P.,
Minister of Public Works.

SIR,—I have the honor to submit herewith the report of the Department of Public Works for the year 1912.

Owing to the amount of railway construction and extensive settlement that has taken place in the past few years, new towns have sprung up which alter the trend of traffic in portions of the country which are fairly well settled and were provided with roads leading to their then existing towns, thus causing a great deal of extra work in opening up roads giving more direct access to the new places of business established. This, with the railway construction through new country, accounts for a great deal of urgent work and there is difficulty in coping with the increased requirements.

During the year there were 472 bridges dealt with by the department. Of these 126 were repairs and 337 were new wooden bridges constructed during the year. There were also six steel bridges completed and nine were begun but not carried to completion.

The most important structures which were completed during 1912 are: Steel bridge over Pembina River at Belvedere, consisting of two 125 ft. highway spans; bridge over Little Bow River, east of Carmangay, consisting of an 80 ft. highway span; also bridge over Little Red Deer River, west of Olds, consisting of 100 ft. highway span with four 20 ft pile bent approaches.

Work was commenced on the following important structures, but they were not completed during the year 1912: Steel bridge over Sheep Creek at Okotoks, consisting of two 200 ft. highway spans, in concrete substructure; steel bridge over Battle River, north of Chauvin, consisting of a 110 ft. highway span; steel bridge over Battle River, north of Edgerton, consisting of a 125 ft. steel span; steel bridge over Little Red Deer River, west of Innisfail, consisting of a 100 ft. highway span with four 20 ft. pile bent approaches; also steel bridge over Medicine River, north of Markerville, consisting of a 100 ft. steel span with two 20 ft. pile bent approaches.

In view of the great demand for bridges over the larger streams, owing to the influx in population and change in trend of traffic in the various portions of the province, it makes it impossible for the department to undertake all this bridge work at the same time, we find it necessary

to supply some means of letting the traffic cross these larger streams other than bridges and in this connection there were 49 ferries operated during the season, free of charge between 7 a. m. and 6 p. m., after which the usual tolls were charged.

A large amount of trunk road work was done during the year, but it was not the policy of the department, in the construction of trunk roads, that Macadam roads be built. The policy being to make use of the best material available without the expense of shipping by rail. In the construction of earth roads during the past season, with this object in view, we endeavored, as far as possible, to build them up to a rounding surface with grader, then maintain their surface by frequently dragging to fill ruts, caused by wheel traffic. Where it was possible to have this system of road dragging carried out, and the soil was such that it would supply a wearing surface which would withstand wheel traffic, good results were obtained, and a good foundation laid upon which we can, at some future date if the increase of traffic makes it necessary, top dress this with a layer of gravel or other good road material which would furnish a better wearing surface for heavy traffic. In certain sections of the country the rounding of a road with grader and dragging to fill ruts would not, owing to the nature of the soil, withstand even light traffic. It was therefore necessary to haul in the most suitable gravel or other road material that could be obtained, at a reasonable distance, as a top dressing, which would furnish a better surface for traffic. In other portions of the province it was necessary to do considerable draining, grading laying of brush and corduroy, where such was necessary, and covering same, this being necessary to bring the surface of the road above water level, as a water-soaked road cannot be good. We followed this up by grading or dragging the road and leaving it, after completion, with a rounding surface that would shed water. The maintenance of earth roads is of vast importance, more especially where the wearing surface will not withstand traffic when wet. Thus the dragging of the road, to keep it free from wheel ruts, is all important, for if there are ruts the road will retain water on its surface and soon become water-soaked. It is quite evident that, in certain districts, earth roads without a top dressing will have to be used for some time to come, as the distance at which a more suitable road material could be obtained is so great that it would make the cost of haulage prohibitive at the present time. But no doubt when the country is more thickly settled the demand will warrant this expense.

There was also a large amount of work done on roads other than trunk roads. This work was more of a temporary nature and consisted principally of relieving the urgent needs of the outlying settlers to enable them to get to a trunk road. There was also work of this class done in organized Local Improvement Districts and, in this connection, it was our policy to obtain the co-operation of the said districts. It is very gratifying to note that in many localities these districts are putting forth their best efforts to co-operate with the department in establishing a uniform system of roads.

The increase in settlement becomes more marked each year and therefore the work of the survey branch is constantly growing and it appears absolutely necessary for us, in order to keep pace with the work during the coming season, to add to our survey's staff in the field.

The number of surveys and examinations made were 590. Plans prepared and filed in the Land Titles Office, 506, and Certificates of Title received, 381, and amount received as rental for leased road allowance, \$372.00.

Referring to the administration of the Boilers Act in the province: The operation of the "Boilers Act" enacted February 16th, 1912, which embodies most of the sections previously contained in Chapter 23, 1906, with additions necessary to meet advanced requirements of the province, is proving most satisfactory. The returns of this branch show a marked increase over last year, and the inspectors all report their inability to cover all of their districts within the year. The boiler regulations adopted and put in force during 1910 still continue to give entire satisfaction. These are issued in book form, and have now become so widely known and appreciated that requests for copies have been received from Great Britain, Panama, most of the States in the Union to the south of us, as well as from other foreign countries. Twenty-seven per cent. of the boilers inspected in the province last year have been built to these regulations.

In addition to the regular monthly examinations for engineers, held at the respective headquarters of the District Inspectors, sixty-two regularly advertised examinations were held at various points throughout the province during the spring of the year, in order to accommodate candidates living in the outlying districts. In all, a total of 1,354 candidates presented themselves for examination. The number of certificates issued for boilers inspected during the year total 1,590.

Fees collected for all purposes amounted to \$18,719.70, as compared with \$15,388.05 for the previous year. Detailed reports submitted by the inspectors will be found elsewhere and give a general statement in brief of the work performed by the Boilers Branch during the year.

It will be noted, from the report of the chief boiler inspector, that we have at the present time some 150,000 boiler horsepower under our supervision throughout the province. Forty-four per cent. of this power is being used for development and industrial purposes, 38 per cent. for agricultural purposes, and 18 per cent. for the operation of coal mines.

Notwithstanding the largely increased number of boiler plants in operation, we are pleased to be able again to report no accidents to boilers or machinery causing either loss of life or serious injury to any person.

The reports, which have been received by the Coal Mines Branch from the different mines operating in the province, show that the output for the year 1912 was 3,446,349 tons. This is the largest output that has yet been produced in the province and is an increase of 409,592 tons over the year 1910 and an increase of 1,751,785 tons over the year 1911.

During the year 46 new mines were opened up and are being developed, the total number of mines operating in the province at the end of December being 243.

There were 21 fatal accidents in the province of which 16 occurred underground and five above ground.

At the beginning of the year a commission was appointed for the purpose of investigating into mining conditions generally throughout

the province. This commission has been sitting almost continuously since that time and has submitted its report in the form of a proposed act.

Mine Rescue Stations have been established at Blairmore and Lethbridge and are being conducted under the supervision of superintendents who are thoroughly conversant with the use of mine rescue apparatus.

Further information and statistics, in connection with mining can be obtained from the report of the Provincial Inspector of Mines.

In the construction of public buildings considerable progress has been made, and this will be dealt with fully in the reports of the Provincial Architect and Structural Engineer.

By referring to the Accountant's Report, a fair idea of the increase in the accounting department can be obtained.

The work and staff of the Correspondence Branch has been reduced, in view of the fact that prior to 1912 this department included the correspondence for the Municipal or Local Improvement and Telephone Branches, which are now separate departments. The total number of communications dealt with during the year was 103,200 and the amount of cash received from all sources was \$166,000.05.

Respectfully submitted,

JNO. STOCKS,
Deputy Minister.

BRIDGES

During the year 1912 there were 472 bridges dealt with by this department. Of these 126 were repairs and 337 were new wooden bridges constructed during the year. There were also six steel bridges completed and nine were begun, but not carried to completion.

The steel bridge on the Pembina River at Belvedere, two 125 ft. highway spans, the 80 ft. highway steel span over the Little Bow River in 33-13-20-4 and the 100 ft. pony truss highway steel span with four 20 ft. pile bent approaches over the Little Red Deer River north of 31-33-3-5 were all completed and open for traffic early in the season.

A 60 ft. steel span with one 20 ft. pile bent approach was put on the Sturgeon River west of Ray and another 60 ft. steel span was erected over the same river at section 25-55-24-4. A 60 ft. steel span with two 20 ft. pile bent approaches was put in on the Red Water River on the Athabasca Landing trail.

An 80 ft. steel span with two 20 ft. pile bent approaches over the Little Bow River east of Parkland was nearing completion at the end of the year and the substructure was put in place and the steel being erected on the one 100 ft. steel highway span with four 20 ft. pile bent approaches on the Little Red Deer River between 9/16-37-2-5 and on the one 100 ft. steel highway span with two 20 ft. pile approaches on the Medicine River in 3-37-2-5. These bridges will be completed and open for traffic early in 1913.

Concrete abutments have been erected and a 40 ft. steel span will be put over Ross Creek north of section 32-54-22-4 at Fort Saskatchewan. A 125 ft. steel highway span is being put over the Battle River north of Edgerton, and a 110 ft. steel highway span is being erected over the same river north of Chauvin. These bridges will also be completed early in 1913.

Work was begun on the bridge over Sheep Creek at Okotoks where two 200 ft. steel highway spans are being put in on concrete substructure. A similar bridge was started in the Old Man River south of Monarch, and a bridge of three 200 ft. steel highway spans on concrete piers and abutments is under construction on the Belly River north of Coaldale.

An 80 ft. steel span on concrete substructure is also being put in on the Old Man River south of Burmis.

Material has been purchased for an 80 ft. steel highway span with two 20 ft. approaches on the Battle River at 25-45-23-4. This bridge will be built on pile substructure and will be completed early in 1913.

The wooden bridges erected during the year were, with a few exceptions, of the standard pile bent type and a list of all work completed during the year is hereto appended.

BRIDGES.

STREAM	LOCATION	REMARKS
Arrowwood Creek	28-20-3-4	One 18 ft. span on piles.
Amisk Creek	14/15-50-18-4	Two 18 ft. spans on piles.
Amisk Creek	14/15-50-18-4	Two 18 ft. spans on piles.
Amisk Creek	10/11-50-18-4	One 18 ft. span on piles.
Amisk Creek	S. 3-50/18-4	One 16 ft. span on piles.
Amisk Creek	14/15-49-19-4	Repairs.
Amisk Creek	16/17-49-19-4	Repairs.
Amisk Creek	10/11-50-18-4	One 18 ft. span on piles.
Bull Horn Coulee	27/34-2-27-4	Repairs.
Battle River	33-43-18-4	Repairs.
Beaver Creek	9/10-9-29-4	One 20 ft. span on piles.
Beddington Creek	23/26-25-1-5	Three 20 ft. spans on piles.
Blind Man River	21/28-40-1-5	Repairs.
Bench Creek	53-16-5	45 ft. span. Log bridge.
Belly River	N. of Taber	Repairs.
Belly River	At Lethbridge	Repairs.
Belly River	16-6-25-4	Repairs.
Beaver Creek	W. 31-9-29-4	Repairs.
Bulls Head Creek	28/29-11-5-4	Repairs.
Big Timber Creek	14/15-4-6-4	Two 20 ft. spans on piles.
Big Beaver Creek	36/63-13-4	Repairs.
Bear Creek	N. 8-72-6-6	84 ft. bridge.
Bear Creek	N. 23-71-6-6	Three 20 ft. spans on piles.
Bear Creek	N. 22-73-8-6	Two 16 ft. spans on piles.
Bear Creek	11/14-73-8-6	80 ft. bridge.
Bear Creek	33/34-73-8-6	84 ft. bridge.
Battle Creek	31/36-42-25/26-4	Repairs.
Bow River	S.W. of Gleichen	Repairs.
Boomers Creek	6/1-38-11/12-4	One 16 ft. frame.
Bomans Creek	30/25-37-11/12-4	One 16 ft. frame.
Birch Creek	8/9-57-23-4	Three 16 ft. spans on piles.
Baptiste Creek	1/6-67-23/24-4	Two 18ft and one 14 ft. spans on piles.
Big Valley Creek	23/26-35-20-4	One 16 ft. frame.
Berry Creek	12/13-25-13-4	Two 20 ft. spans on piles.
Berry Creek	11/14-24-13-4	Four 20 ft. spans on piles.
Berry Creek	4-22-12-4	Three 20 ft. spans on piles.
Berry Creek	3/33-22/23-12-4	Three 20 ft. spans on piles.
Battle River	33/34-44-23-4	Repairs.
Battle River	36/1-44/45-23-4	Repairs.
Battle River (Branch)	5/6-46-23-4	Repairs.
Battle River	W. 6-45-27-4	Two 20 ft. spans on piles.
Beaver Lodge River	E. 13-71-10-6	60 ft. truss.
Coulee	19/30-74-16-5	One 16 ft. span on piles.
Creek	24/25-74-17-5	One 20 ft. span on piles.
Coulee	29/30-5-20-4	One 16 ft. span on piles.
Creek	13-3-28-4	One 18 ft. span on piles.
Coulee	10/11-5-20-4	One 18 ft. span on piles.
Creek	9-3-26-4	Repairs.
Creek	16/17-5-17-4	Repairs.
Coulee	25/26-4-22-4	One 20 ft. span on piles.
Creek	23-24-4-22-4	One 16 ft. span on piles.
Coulee	E. 22-17-4	One 16 ft. span on piles.
Coulee	34/35-4-22-4	Two 18 ft. spans on piles.
Cottonwood Creek	N.W. 20-2-29-4	One 20 ft. frame.
Creek	N. 31-2-26-4	Repairs.
Coulee	28/29-5-21-4	One 18 ft. span on piles.
Creek	7/18-1-11-4	One 18 ft. span on piles.
Creek	N. E. quarter 7-3-21-4	One 16 ft. span on piles.
Creek	N. E. quarter 7-3-21-4	One 12 ft. span on piles.

STREAM	LOCATION	REMARKS
Creek	9/16-1-14-4	One 16 ft. frame.
Creek	7/18-1-13-4	One 16 ft. frame.
Creek	17/18-45-18-4	One 16 ft. span on piles.
Coulee	13-48-17-4	One 18 ft. span on piles.
Creek	15/16-47-16-4	One 16 ft. span on piles.
Creek	14/15-47-16-4	One 16 ft. span on piles.
Creek	2-43-18-4	One 18 ft. span on piles.
Creek	2/3-43-18-4	One 18 ft. span on piles.
Coulee	10/15-43-18-4	One 18 ft. span on piles.
Creek	27/28-42-18-4	One 16 ft. span on piles.
Creek	27/28-42-18-4	One 18 ft. span on piles.
Creek	30-11-28-4	One 18 ft. span on piles.
Creek	9-11-29-4	One 18 ft. span on piles.
Creek	24/25-14-29-4	One 20 ft. span on piles.
Coal Creek	S. 2-27-5-5	Repairs.
Creek	S. 13-28-29-4	One 16 ft. span on piles.
Creek	13/14-27-1-5	One 16 ft. span on piles.
Creek	24/25-29-5-5	One 16 ft. span on piles.
Creek	N. 23-26-5-5	One 16 ft. span on piles.
Creek	27/28-28-1-5	One 20 ft. span on piles.
Creek	13/14-31-24-4	Three 20 ft. spans on piles.
Coulee	24/25-29-23-4	One 20 ft. span on piles.
Coulee	23/24-29-23-4	One 20 ft. span on piles.
Creek	N.W. 15-29-23-4	One 20 ft. span on piles.
Creek	N.W. 15-29-23-4	One 20 ft. span on piles.
Creek	13/14-26-1-5	Repairs.
Crowfoot Creek	6/31-21/22-20-4	Two 20 ft. spans on piles.
Creek	14/15-26-1-5	One 20 ft. span on piles.
Creek	N.E. Cor. 33-27-23-4	One 20 ft. span on piles.
Crowfoot Creek	28-23-21-4	Repairs.
Creek	19-19-27-4	One 16 ft. span on piles.
Creek	3/10-36-1-5	One 20 ft. span on piles.
Creek	5-35-28-4	Reconst. 20 ft. bridge on piles.
Creek	8-35-28-4	Repairs.
Creek	8/17-35-28-4	Repairs.
Creek	14/15-37-1-5	One 20 ft. span on piles.
Creek	24/25-36-28-4	One 18 ft. span on piles.
Creek	16/17-39-25-4	Two 18 ft. spans on piles.
Creek	1/2-40-6-5	One 20 ft. span on piles.
Creek	11/12-40-6-5	One 20 ft. span on piles.
Creek	1/6-40-5/6-5	Two 20 ft. spans on piles.
Creek	31/32-40-24-4	One 16 ft. span on piles.
Creek	30/31-40-24-4	One 16 ft. span on piles.
Creek	E. 30-40-24-4-4	One 16 ft. span on piles.
Carrot Creek	28/33-53-13-5	One 40 ft. log bridge.
Chin Coulee	35/36-7-17-4	One 18 ft. span on piles.
Coulee	1-10-17-4	One 18 ft. span on piles.
Coulee	4/33-9/10-17-4	One 18 ft. span on piles.
Coulee	1/36-9/10-18-4	One 18 ft. span on piles.
Coulee	3/34-9/10-18-4	One 18 ft. span on piles.
Coulee	6-10-17-4	Two 20 ft. spans on piles.
Coulee	2/35-9/10-17-4	One 18 ft. span on piles.
Coulee	34/35-11-17-4	One 16 ft. span on piles.
Creek	7/12-9-19/20-4	One 16 ft. span on piles.
Creek	2/35-8/9-19-4	Repairs.
Creek	W. 30-49-25-4	One 20 ft. span on piles.
Conjuring Creek	24/25-48-27-4	Two 20 ft. spans on piles.
Creek	1/12-48-27-4	Two 18 ft. spans on piles.
Creek	9/16-49-2-5	Two 18 ft. spans on piles.
Creek	9/16-49-26-4	One 20 ft. span on piles.
Canyon	1/2-50-2-5	One 20 ft. and two 14 ft. spans on piles.
Creek	21/28-49-2-5	Two 18 ft. spans on piles.
Creek	E. 31-49-1-5	Two 18 ft. spans on piles.

STREAM	LOCATION	REMARKS
Creek	N. 33-49-26-4	One 20 ft. span on piles.
Creek	W. 1948-23-4	Two 20 ft. and one 18 ft. spans on piles.
Conjuring Creek	1/2-50-27-4	Two 20 ft. frames.
Creek	17/18-8-25-4	Three 18 ft. spans on piles.
Creek	9/10-8-25-4	One 18 ft. span on piles.
Creek	9/10-8-25-4	One 18 ft. span on piles.
Creek	6-8-25-4	One 18 ft. span on piles.
Creek	7/8-8-25-4	One 16 ft. span on piles.
Creek	N. 35-7-26-4	One 20 ft. span on piles.
Creek	34-7-26-4	One 20 ft. span on piles.
Creek	3-8-26-4	One 20 ft. span on piles.
Creek	26/27-7-26-4	One 18 ft. span on piles.
Creek	23/26-7-26-4	One 16 ft. span on piles.
Creek	16-6-25-4	One 16 ft. span on piles.
Creek	7/18-7-25-4	One 12 ft. span on piles.
Creek	33/34-11-7-4	One 20 ft. span on piles.
Creek	28/29-13-6-4	One 20 ft. span on piles.
Coulee	30-11-1-4	Repairs.
Coulee	13/18-9-7/8-4	One 16 ft. span on piles.
Creek	13/18-7-6/7-4	Two 20 ft. spans on piles.
Coulee	25/30-7-6/7-4	One 20 ft. span on piles.
Coulee	1/6-6-5/6-4	One 16 ft. span on piles.
Coulee	12/7-5-5/6-4	One 16 ft. span on piles.
Creek	21/22-12-7-4	One 16 ft. span on piles.
Creek	S.W. 6-16-28-4	One 20 ft. span on piles.
Creek	16-16-1-5	One 20 ft. span on piles.
Creek	W. half of 13-16-30-4 ..	One 20 ft. span on piles.
Creek	13-16-1-5	One 20 ft. span on piles.
Creek	8-60-8-4	One 16 ft. log bridge.
Creek	6-58-2-5	One 18 ft. span on piles.
Creek	21/22-58-2-5	One 16 ft. span on piles.
Creek	21/22-81-24-5	One 20 ft. log bridge.
Creek	N. 21-81-24-4	Two 16 ft. log bridges.
Creek	33-81-24-4	One 24 ft. log bridge.
Camp Creek	W. 30-71-9-6	42 ft. bridge.
Coulee	29-7-1-5	Repairs.
Coulee	34/35-4-28-4	Two 18 ft. spans on piles.
Chipman Creek	13/14-6-30-4	Repairs.
Creek	S.E. 23-6-30-4	Repairs.
Creek	5/6-9-1-5	One 16 ft. span on piles.
Creek	S. 2-42-23-4	One 16 ft. span on piles.
Creek	8/17-42-2-5	One 16 ft. span on piles.
Creek	4/5-42-2-5	One 16 ft. span on piles.
Creek	8/17-42-26-4	One 18 ft. span on piles.
Creek	1/6-44-28/27-4	One 18 ft. span on piles.
Creek	14-44-1-5	One 18 ft. span on piles.
Creek	N. 24-37-24-4	One 18 ft. span on piles.
Creek	8/9-38-23-4	One 18 ft. span on piles.
Creek	1/12-38-26-4	One 18 ft. span on piles.
Creek	27/28-37-1-5	One 18 ft. span on piles.
Creek	14/15-38-1-5	One 16 ft. frame.
Creek	34/35-38-4-5	Driving piles.
Creek	31/36-38-3/4-5	Driving piles.
Creek	23/24-39-3-5	One 18 ft. span on piles.
Creek	14/15-38-25-4	One 18 ft. span on piles.
Creek	7/18-37-27-4	Two 18 ft. spans on piles.
Creek	On Michel Calaboo Reserve	Repairs.
Creek	32-54-27-4	Repairs.
Creek	23/26-57-24-4	One 20 ft. span on abutments.
Creek	14/15-58-25-4	One 16 ft. span on abutments.
Creek	14/15-35-6-4	One 18 ft. span on piles.

STREAM	LOCATION	REMARKS
Creek	27/28-34-5-4	One 18 ft. span on piles.
Creek	21/22-52-25-4	Repairs.
Creek	11-51-26-4	Driving piles.
Creek	36-51-26-4	Driving piles.
Creek	N. 34-52-24-4	Repairs.
Creek	4/33-29/30-18-4	One 16 ft. frame.
Creek	29-30-30-17-4	One 16 ft. frame.
Creek	31/5-30/31-17-4	One 16 ft. frame.
Creek	28/29-54-20-4	One 16 ft. span on piles.
Creek	9/10-57-17-4	One 16 ft. span on piles.
Creek	19/24-58-18/19-4	One 20 ft. span on piles.
Creek	11/12-57-17-4	One 20 ft. span on piles.
Creek	25/30-49-12/13-4	Grading.
Creek	1/2-51-16-4	One 16 ft. frame
Creek	10/15-54-14-4	Grading
Creek	13/14-53-7-4	One 16 ft span on piles
Creek	1/2-53-7-4	One 16 ft span on piles
Creek	9/16-46-26-4	Repairs
Creek	19/24-45-1/2-3	One 20 ft span on piles
Creek	34-36-3-5	One 16 ft. span on piles.
Creek	S. 26-46-3-5	Two 20 ft. spans on piles.
Creek	N. 22-46-3-5	Two 20 ft. spans on piles.
Creek	S. 16-46-23-4	Two 18 ft. spans on piles.
Creek	16/17-46-24-4	One 16 ft. span on piles.
Creek	19/20-46-2-5	One 20 ft. span on piles.
Creek	17/18-46-2-5	One 20 ft. span on piles.
Creek	11/14-46-1-5	One 18 ft. span on piles.
Creek	34-46-3-5	One 16 ft. span on piles.
Creek	S. 26-46-3-5	One 20 ft. span on piles.
Creek	23/24-45-26-4	One 20 ft. span on piles.
Creek	22/23-49-18-4	One 16 ft. span on piles.
Deep Creek	25/30-74-16-17-5	Repairs.
Drift Pile River	73-12-5	60 ft truss.
Deer Creek	10/15-1-12-4	Three 20 ft. spans on piles.
Dried Meat Creek	18-45-18-4	One 18 ft. span on piles.
Dried Meat Creek	13/14-45-19-4	One 18 ft. span on piles.
Dried Meat Creek	9/16-46-18-4	One 18 ft. span on piles.
Dried Meat Creek	15/16-45-18-4	Repairs.
Drywood Creek	N. 35-4-29-4	Two 20 ft. spans on piles.
Deep Creek	31/32-58-23-4	Repairs.
Deep Creek	11/12-55-21-4	One 20 ft. span on piles.
East Prairie Creek	11-74-16-5	Repairs.
Elbow River	Weasel Head Crossing	Repairs.
Eagle Creek	3/34-33/34-4-5	One 20 ft. span on piles.
Eagle Valley Creek	23/24-34-4-5	One 20 ft. span on piles.
Eagle Creek	28/29-33-4-5	Piles driven.
Eye Hill Creek	36-37-1-4	One 12 ft. frame.
Eye Hill Creek	15/16-31-1-4	One 12 ft. frame.
Eye Hill Creek	2/3-37-2-4	One 16 ft. frame.
Fish Creek	N. 7-3-27-4	Repairs.
Floyds Coulee	16-29-24-4	One 16 ft. frame.
Fish Pond Creek	30-52-2-5	Repairs.
Frog Creek	8-55-1-5	Repairs.
Fifteen Mile Outlet	3/4-7-20-4	Grading.
Fish (s. fork) Creek	3/4-22-3-5	Repairs.
Fish Creek	22-22-3-5	Repairs.
Fish (s. fork) Creek	22-22-3-5	Repairs.
Frog Creek	8-56-3-4	Repairs.
Fish Creek	3/4-73-8-6	One 20 ft. span on piles.
Fulton's Creek	N. 36-52-24-4	Repairs.

STREAM	LOCATION	REMARKS
Goose Creek	R. L. 9-45-3-5	Repairs.
Griffin Creek	21/22-81-25-5	52 ft. bridge.
Goodridge Coulee	34/35-52-25-4	Repairs.
Grizzley Bear Coulee ..	30-49-6-4	One 16 ft. frame.
Grizzley Bear Coulee ..	1/6-50-7/8-4	Grading.
Haystone Creek	At Ft. McMurray	40 ft. timber truss.
High River	At High River	Repairs.
Haunted Lake	N.E. 31-39-22-4	Nine 20 ft. spans on piles.
Haynes Creek	9/10-39-24-4	Repairs.
Haynes Creek	2/3-39-24-4	Two 15 ft. spans on piles.
Hudson's Bay Creek ..	5-49-2-5	One 18 ft. span on piles.
Hay Coulee	3/4-8-26-4	Repairs.
High River	16-21-28-4	Repairs.
Hay-Camp Creek	71-1-6	One 20 ft. log bridge.
Heart River	At Peace River Cr.	Repairs.
Horseguard Creek	31/6-38/39-5-5	One 20 ft. span on piles.
Hares Creek	3-33-54/55-21-4	One 16 ft. span on piles.
Hares Creek	33/34-54-21-4	One 16 ft. span on piles.
Horseguard Creek	11/14-40-6-5	30 ft. truss.
Irrigation Canal	15/16-6-21-4	Grading.
Irrigation Canal	5/6-8-20-4	Two 20 ft. spans on piles.
Irrigation Canal	19/24-8/19/20-4	Two 20 ft. spans on piles.
Irrigation Canal	7/8-9-19-4	Two 20 ft. spans on piles.
Irrigation Canal	7/12-9-20/21-4	One 18 ft. span on piles.
Irrigation Canal	10/15-9-19-4	Two 20 ft. spans on piles.
Irrigation Canal	4/5-6-41-4	Repairs.
Irrigation Canal	5/6-8-20-4	Grading.
Irrigation Canal	7/8-6-19-4	One 20 ft. span on piles.
Indian Farm Creek	21/28-5-29-4	Three 20 ft. spans on piles.
Iron Creek	E 13-43-10-4	Two 18 ft. spans on piles.
Iron Creek	17-43-9-4	Repairs.
James River	14-34-5-5	Bank protection.
Kipp Coulee	26/27-5-20-4	One 20 ft. span on piles.
Kipp Coulee	26/27-5-19-4	Repairs.
Kneehill Creek	N.E. ¼ 15-29-23-4	Repairs.
Kneehill Creek	14-29-23-4	Four 20 ft. spans on piles.
Kneehill Creek	17/20-29-23-4	Three 20 ft. spans on piles.
Kneehill Creek	16/71-29-23-4	Three 20 ft. spans on piles.
Kneehill Creek	15/16-29-24-4	One 16 ft. span on piles.
Kipp Coulee	20/29-6-17-4	Two 16 ft. spans on piles.
Kipp Coulee	14/15-6-17-4	Two 16 ft. spans on piles.
Katchemut Creek	13/18-51-18/19-4	Repairs.
Katchemut Creek	S. 4-51-19-4	One 18 ft. span on piles.
Kipp Coulee	31/36-5-9/10-4	Grading.
Little Sucker Creek ...	15-74-14-5	Three 16 ft. spans on piles.
Lees Creek	At Cardston	Repairs.
Little Bow River	19/30-35-1-5	Repairs.
Lobstick River	34/35-53-9-5	Eight 20 ft. spans on piles.
Long Lake (outlet) ...	2/35-56/57-3-5	One 20 ft. abutment.
Lonesome Creek	29/30-15-16-4	One 16 ft. span on piles.
Little Bow River	33/34-13-20-4	80 ft. steel bridge with two 20 ft. spans.
Little Bow River	5-15-21-4	Grading.
Lost River	27/28-3-6-4	Two 20 ft. spans on piles.
Little Red Deer River..	32-34-2-5	Repairs.
Little Red Deer River..	34/2-33/34-3-5	One 100 ft. steel and four 20 ft. approaches.
Little Beaver Creek ...	18-64-12-4	Repairs.
Lake	16-39-1-4	Three 20 ft. spans on piles.

STREAM	LOCATION	REMARKS
Little Pine Creek	10/15-65-22-4	Repairs.
Little Red Deer River..	9/16-35-2-5	One 100 ft. steel, four 20 ft. piles.
Moose River	On L. S. L. Trail	Repairs.
Milk River	36-1-13-4	Repairs.
Meeting Creek	4/5-43-19-4	Two 16 ft. spans on piles.
McLaughlin Creek	1-19-29-4	Repairs.
Medicine River	327-2-5	One 100 ft. steel and two 20 ft. spans.
McKay Creek	3/34-11/12-1-4	Four 20 ft. spans on piles.
Mosquito Creek	12-16-28-4	One 30 ft. truss and two 20 ft. spans on piles.
Mosquito Creek	W. 30-16-28-4	Three 20 ft. spans on piles.
Mosquito Creek	12/13-26-1-5	Two 18 ft. spans on piles.
Mosquito Creek	13-16-28-4	Repairs.
Mosquito Creek	15-16-28-4	Repairs.
Moose Creek	26-56-5-4	Two 16 ft. spans on piles.
Meeting Creek	29-41-17-4	Two 20 ft. spans on piles.
Modeste Creek	35-26-3-5	One 16 ft. span on piles.
Narrows	L. S. L.	Repairs.
Nose Creek	12-27-1-5	Repairs.
Nose Creek	23/26-27-1-5	Three 20 ft. spans on piles.
Nose Creek	12/13-26-15	Grading.
Nine Mile Coulee	22/27-6-1-4	Re-constructed.
N. Paddle River	7/12-59-42-5-5	One 40 ft. truss and two 15 ft. approaches.
North Burnt River	82-1-6	Re-constructed.
Nelson Coulee	34/3-38-11-4	One 20 ft. frame.
N. Sask. River	At Fort Sask.	Repairs.
Old Man River	At Macleod	Repairs.
Outlet of Gull Lake ..	34/35-40-1-5	Two 20 ft. spans on piles.
Old Man River	29-7-1-5	Repairs.
Olivers Creek	N. 35-52-24-4	Repairs.
Old Man Creek	6/31-52/53-22-4	Repairs.
Pot Hole Creek	11/12-4-22-4	Three 20 ft. spans on piles.
Pot Hole (Br.) Creek ..	N.E. 14-4-22-4	Two 20 ft. spans on piles.
Pot Hole Creek	17-7-2-4	Grading.
Peigon Creek	19/24-7-6/7-4	Two 20 ft. spans on piles.
Peigon Creek	19/24-7-6/7-4	Two 20 ft. spans on piles.
Pembina River	11-58-3-5	Two 125 ft. steel completed.
Pine Creek	73-5-6	60 ft. bridge.
Pine Creek	20-3-29-4	Three 20 ft. spans on piles.
Pine Creek	3-65-21-4	Two 16 ft. spans on piles.
Pine Creek	6-66-20-4	Two 16 ft. spans on piles.
Pine Creek	34/35-58-19-4	One 20 ft. frame.
Pipestone Creek	24-46-23-4	Repairs.
Paddle River	17/18-59-3-5	Two 40 ft. trusses and two 15 ft. approaches.
Ribstone Creek	2/35-43/44-4-4	Two 16 ft. spans on piles.
Ribstone Creek	20/29-43-2-4	One 18 ft. span on piles.
Ribstone Creek	28/29-43-2-4	One 20 ft. span on piles.
Rosebud Creek	16/17-31-1-5	Three 20 ft. spans on piles.
Rosebud Creek	22/23-27-23-4	Three 20 ft. spans on piles.
Red Deer River	8-21-5-3-5	Bank protection.
Raven (s. fork) River..	1/12-36-6-5	Two 16 ft. spans on piles.
Raven River	20/29-36-4-5	Two 20 ft. spans on piles.
Red Deer River	7-36-28-4	Repairs.
Raven River	8/9-36-5-5	Two 20 ft. spans on piles.
Ross Creek	31/36-11-2/3-4	Three 20 ft. spans on piles.
Röss Creek	28-12-5-4	Repairs.
Ross Creek	23-12-5-4	Repairs.

STREAM	LOCATION	REMARKS
Ross Creek	24/25-9-3-4	Two 20 ft. spans on piles.
Red Deer River	3-33-5-5	Repairs.
Red Deer River	36-33-5-5	Bank protection.
Red Deer River	34-32-5-5	Bank protection.
Red Deer River	36-33-5-5	Repairs.
Ravine	34/35-38-27-4	Repairs.
Rock Creek	29-7-2-5	Repairs.
Redwater River	26/27-58-24-4	Two 16 ft. spans on piles.
Redwater River	35/36-58-25-4	Two 16 ft. spans on piles.
Riv. qui Barre	21/22-55-26-4	One 16 ft. span on piles.
Ribstone Creek	15/16-40-6-4	One 20 ft. span on piles.
Ribstone Creek	20/21-40-6-4	One 18 ft. span on piles.
Ribstone Creek	21/28-40-6-4	One 18 ft. span on piles.
Ribstone Creek	21/28-40-6-4	Two 18 ft. spans on piles.
Ribstone Creek	26/27-40-6-4	Two 18 ft. spans on piles.
Ribstone Creek	5/32-36/37-9-4	One 18 ft. span on piles.
Ribstone Creek	1/36-37/38-9-4	One 18 ft. span on piles.
Ravine	22-52-25-4	Seven 20 ft. spans, double deck, pile trestle.
Ravine	22/23-51-25-4	Repairs.
Ross Creek	4/33-53/54-22-4	One 20 ft. span on piles.
Redwater River	5-59-23-4	60 ft. steel, two 20 ft. piles.
Redwater River	6/31-58/57-21-4	Three 20 ft. spans on piles.
Redwater River	20/21-59-24-4	Repairs.
Redwater River	27-59-24-4	One 20 ft. span on piles.
Red Willow Creek	24/25-41-18-4	Two 20 ft spans on piles.
Red Willow Creek	33/4-39/40-18-4	One 18 ft. span on piles.
Red Willow Creek	31/32-39-18-4	One 18 ft. span on piles.
Ross Creek	28/29-54-22-4	One 20 ft. span on piles.
Ross Creek	26/27-54-22-4	One 20 ft. span on piles.
Ross Creek	N 32-54-22-4	One 40 ft. steel, concrete abutments.
Sucker Creek	74-14-5	Repairs.
South Heart River	25-76-16-5	60 ft. truss and two 20 ft. piles.
Salt Creek	76-14-5	Repairs.
Snake Creek	6/31-1/2-25-4	Repairs.
Snake Creek	23-2-25-4	Repairs.
Sandstone Creek	8/17-1-12-4	One 40 ft. truss.
St. Mary's River	23-3-25-4	Repairs.
Spruce Coulee	7/8-42-17-4	One 18 ft. span on piles.
Stoney Creek	SW 8-46-20-4	Two 18 ft. spans on piles.
Slough	10/15-48-17-4	One 14 ft. span on piles.
Shaffer Creek	14-11-29-4	One 18 ft. span on piles.
Shaffer Creek	23-11-29-4	One 18 ft. span on piles.
Stoney Creek	23/26-29-5-5	One 20 ft. span on piles.
Spotted Creek	20/29-40-22-4	Two 18 ft. spans on piles.
Shining Bank Creek ..	23-56-14-5	One 25 ft. abutment.
Six Mile Coulee	16/17-8-21-4	Bridge re-constructed.
Seven Persons Creek ..	29-12-5-4	Repairs.
Seven Persons Creek ..	33/34-11-6-4	Three 20 ft. spans on piles.
Seven Persons Creek ..	23/26-10-7-4	Two 20 ft. spans on piles.
Seven Persons Creek ..	20/29-10-7-4	Two 20 ft. spans on piles.
Seven Persons Creek ..	28/29-10-7-4	Two 20 ft. spans on piles.
Spring Creek	25-20-1-5	Repairs.
Spirit River	W of R L 41	Repairs.
Spirit River	Bet R L 43/45	Repairs.
St. Germain Creek	Shaftsbury Settlement.	Repairs.
Swamp Creek	Spirit R Trail	Seventy foot bridge.
Screw Driver Creek ...	21/22-6-2-5	Two 18 ft. frames.
Sounding Creek	11/14-36-4-4	Two 18 ft. spans on piles.
Sounding Creek	1/6-35-4/5-4	Two 18 ft. spans on piles.
Sounding Creek	13/18-30-3/4-4	One 20 ft. span on piles.
Sounding Creek	13/14-30-6-4	One 20 ft. span on piles.
Sounding Creek	21/22-30-5-4	One 18 ft. span on piles.

STREAM	LOCATION	REMARKS
Sounding Creek	N 33-35-11-4	One 18 ft. span on piles.
Sounding Creek	N 34-35-12-4	One 20 ft. span on piles.
Sturgeon River	6-55-1-5	Repairs.
Sucker Creek	23-58-20-4	Repairs.
Sucker Creek	31/32-58-20-4	One 20 ft. span on piles.
Sturgeon River	25/30-55-23/24-4	One 60 ft. truss.
Sturgeon River	5/8-55-24-4	Re-floored.
Sturgeon River	N 36-54-25-4	Repairs.
Sturgeon River	14-56-23-4	Repairs.
Sturgeon River	29-55-22-4	Repairs.
Spring Creek	5-56-20-4	One 16 ft. span on piles.
Three Hill Creek	12/13-31-24-4	Three 20 ft. spans on piles.
Three Hill Creek	NE 22-31-24-4	Repairs.
Tindstall Creek	19/20-36-1-5	One 20 ft. span on piles.
Twelve Mile Coulee	29/30-10-21-4	Two 20 ft. spans on piles.
Twelve Mile Coulee	29/30-10-21-4	Two 20 ft. spans on piles.
Twelve Mile Coulee	33/4-11/12-7-4	Grading.
Three Hill Creek	19/30-32-24-4	Grading.
Toney River	62-21-4	65 ft. truss and one 20 ft. approach.
Todd Creek	22/23-9-2-4	Two 18 ft. spans on piles.
Towatinaw River	On Landing Trail	Repairs.
Two Creek	1/36-55/56-20-4	One 20 ft. span on piles.
Tween Creek	W 21-45-26-4	One 20 ft. span on piles.
Vermillion River	1-57-21-4	Repairs.
Vermillion River	19-52-14-4	Repairs.
Vermillion River	32/5-52/53-14-4	Grading.
Vermillion River	10/15-49-15-4	One 16 ft. span on piles.
Vermillion River	14/15-49-15-4	One 16 ft. span on piles.
Vermillion River	9/10-53-14-4	Three 18 ft. spans on piles.
Vermillion River	14/15-49-15-4	One 16 ft. span on piles.
Vermillion River	23/24-52-10-4	Grading.
Vermillion River	12/13-54-14-4	Grading.
Vermillion River	20/21-54-11-4	Grading.
Vermillion River	6/1-51-7/8-4	Grading.
Vermillion River	10/15-53-10-4	Three 20 ft. spans on piles.
Vermillion River	N 6-54-10-4	Four 18 ft. spans on piles.
Vermillion River	21-51-9-4	Three 20 ft. spans on piles.
Willow Creek	N 35-1-24-4	Two 20 ft. spans on piles.
Willow Creek	W 28-2-24-4	Three 18 ft. spans on piles.
Wolf Creek	36-40-27-4	One 16 ft. span on piles.
West Arrowood Creek	Blackfoot Ind. Reserve.	Repairs.
Whitemud Creek	17/18-50-25-4	Two 20 ft. spans on piles.
Waterton River	29-6-25-4	Repairs.
Waskahigan River	On Grand Prairie River	80 ft. trusses and three 20 ft. approaches.
Washatinao Creek	9/16-59-19-4	One 20 ft. span on piles.
Washatinao Creek	33-58-19-4	Repairs.
Wolf Creek	30-34-20-4	Two 12 ft. spans on piles.
Willow Creek	5/32-39/40-18-4	One 18 ft. span on piles.
Wakanagan Creek	19/24-51-18/19-4	Repairs.
Wetaskiwin Creek	11-46-25-4	One 18 ft. span on piles

FERRIES

The total number of ferries in operation in the Province of Alberta in the year 1912 was 49. The ferry scow formerly operated on the Pembina River at Belvedere was floated down and installed on the crossing west of Edison.

New ferry scows were built and put in operation on the Pembina River at Entwistle and on the North Saskatchewan River at Rocky Mountain House. These ferries were carried out in the high water and it was impossible to recover them.

The following new ferries were installed:

1. Macleod River, North of Thornton.
2. Red Deer River at Drumheller.
3. Bow River in section 14-18-18-4.
4. Beaver River in township 63-4/5-4.
5. Macleod River, North of Peers.

A new scow was built for the North Saskatchewan River north of Brudheim, but was not put in operation.

The following is a complete list of the ferries in operation in the Province at the close of the year 1912:

1. Red Deer River at Steerford.
2. North Saskatchewan at Brosseau.
3. North Saskatchewan at Desparlais.
4. Pembina River at Holmes Crossing.
5. Bow River, south-east of Gleichen, near Indian school.
6. Red Deer River at Dorothy.
7. Oldman River, near Summerview.
8. North Saskatchewan River at Victoria.
9. North Saskatchewan River at Big Island.
10. Red Deer River at Garrington.
11. North Saskatchewan River, near fourth meridian.
12. Athabasca River at Athabasca Landing.
13. Red Deer River, near Trochu.
14. Pembina River in section 10-60-1-5.
15. North Saskatchewan River at Shandro.
16. North Saskatchewan River at Hopkins Crossing.
17. Red Deer River at Fieldholm.
18. North Saskatchewan River at Rocky Mountain House.
19. Peace River at Peace River Crossing.
20. Narrows of Lac Ste. Anne.
21. North Saskatchewan River, north of Kitscoty.
22. North Saskatchewan River North of Lamont.
23. Pembina River at Sunnibend.
24. Pembina River in Sections 26-56-7-5.
25. North Saskatchewan River at Lamora's Landing.
26. Bow River, South of Strathmore.
27. Peace River at Dunvegan.
28. South Saskatchewan River at Bow Island.
29. Pembina River, at Entwistle.
30. Belly River, North of Coaldale.

31. Red Deer River at Carbon.
32. Red Deer River, North-east of Brooks.
33. Big Smoky River on Edson trail.
34. Little Slave River at Sawridge.
35. Bow River between sections 27/28-15-16-4.
36. Beaver River in sections 15-62-2-4.
37. Bow River at Rocky Buttes.
38. North Saskatchewan River at Moose Telegraph Station.
39. Pembina River at Lunnford.
40. Athabasca River on Edson Trail.
41. Baptiste River on Grand Prairie Trail.
42. Little Smoky River on Edson Trail.
43. Bow River in section 13-17-17-4.
44. Macleod River in section 10-54-16-5.
45. Red Deer River at Drumheller.
46. Bow River in section 14-18-18-4.
47. Pembina River between sections 4/9-60-1-5.
48. Macleod River sections 2-55-14-5.
49. Beaver River township 63-4/5-4.

ORDINARY ROADS, 1912

- Road East of Kitscoty, N. 11/12-50-2-4. Grading and filling.
 Road North-east of Islay through township 51/52-4-4. Inspecting.
 From Dunne east to Ribstone, township 43-2/3-4. Improving road.
 Road South of Blackfoot, township 20/21-40-1/2-4. Improving road.
 Road South of Blackfoot Creek, township 8-48-1-4. Culvert and grading.
 Road north-east of Blackfoot, N. 19/21-50-1-4. Improving and levelling road.
- Smith Portage Road, between Smith Landing and Fort Smith. Improving.
 Old House to Fort McMurray. Improving and levelling road.
 On Indian Reserve, section 7, township 3-27-4. Repairing road.
 From Twin Butte to Oil Wells, 2-29-4. Improving road.
 Road to Mountain View, township 2/3-27-4. Culverts and improving roads.
 Road to South-west of Cardston, township 1/3-25-26-27-4. Improving and levelling road.
- Road near Boundary Creek, south 21-16-9, township 2-25-4. Improving and levelling road.
 Road near Boundary Creek south 21-16-9. Township 2-25-4. Improving and levelling road.
 Road through section 6-5-22-4. Improving road.
 Grade over lake near Kimball. Culvert and filling in.
 Road south of Cardston, repairing side hill, cut and culvert.
 Road east of Taylorville, section 36-31, township 1-23/24-4. Repairing road.
- Road south of R.N.W.M.P. township 2/3-28-4. Repairing road.
 Road south of Aetna, township 2-25-4. Improving road.
 Road North-west of Mountain View, section 13/18, township 2-27/28-4. Repairing road.
 Road North-east of Mountain View, section 17-20, township 2-27-4. Levelling road.
- Road to Magrath, section 13/14-5-22-4. Improving and filling road
 Road W. to Mountain View, section 13/24-2-28-4. Repairing road.
 Road through Raley, section 24/25-2-24-4. Improving road.
 Road West of Kimball, section 34/35-26/27-21/22, township 1-25-4. Improving road.
- Road south of Cardston, section 3/33-2/34, township 2/3-25-4. Levelling road.
- Road east of Cardston, section 3/4-3-25-4. Improving road.
 Trail to Magrath, section 23/24-5-22-4. Improving and levelling road.
 Road to Magrath, 24/25-5-22-4. Improving road.
 Road west of St. Mary R.N.W.M.P., section 3/4-3-25-4. Straightening and improving road.
 Road south of Magrath, section 3/4-5-22-4. Culvert and draining ditch.

- Road leading to Boundary Creek, section 21/28-2-25-4. Improving road.
 Road south of Lee Creek, section 9/10-2-26-4. Levelling road.
 Road north of Boundary Creek, section 13-1-27-4. Side hill cut, and log culverts.
- Road north of Lee Creek, section 33-2-26-4. Improving road.
 Road north of Boundary Creek, section 19-1-26-4. Repairing road.
 Road into Warner, section 7/18-4-14-4. Repairing pot hole and improving road.
- Road north of Kipp Coulee, section 29/20-5-19-4. Improving road.
 Road south from Warner to Milk River, section 5/6-3-16-4. Culverts and improving road.
- Road west of Warner. Improving and levelling road.
 Road through Verdigris Lake, section 1/36, and 6/31, township 3/4-16-4. Improving road.
- Road south of Magrath, section 10/11-14/15, township 5-22-4. Filling and repairing road.
- Road north of 27/28-4-23-4. Repairing road.
 Road North-east of Aetna, section 19/24-2-24-4. Improving road.
 Road from Cardston to Glenwood, township 39-4-5. Repairing road.
 Road north of New Dayton, section 28/29-5-18-4. Repairing road.
 Road south of New Dayton, section 27/22-5-18-4. Culverts and filling.
 Road to Magrath, section 1/6-5-21/22-4. Repairing road.
 Road south of Magrath, section 6/31-4/5-22-4. Culverts. Filling and side hill cut.
- Road south of Quill Coulee, section 28/29-5-21-4. Culverts and two fills.
 Road south-east of Quill Coulee, section 5-21-4. Grading and improving.
 Road East of Quill Coulee, section 22/27-5-21-4. Grading and improving.
 Road between Milk River and Verdigris Coulee, south of 28-2-14-4. Culverts and grading.
- Road east of Haymeadow Trail, section 25/30-13/18, township 5-20/21-4. Grading and improving.
- Road north of Warner, section 35-4-17-4. Repairing road.
 Road from Warner east, township 4-9/10-4. Grading and improving.
 Section 24/25-3-12-4. Building culverts.
 Road near Warner, township 3-9-4. Culverts and improving road.
 Road south-west of Warner, 20/29-3-17-4. Culverts and improving road.
 Road west of Warner, south and east. 14-4-17-4. Fixing pot holes and small culverts.
- Road Milk River bridge to Wolfred Elevator, township 2/3-24-4. Improving road.
- Road east of Haymeadow, section 16/17-5-24-4. Improving road.
 Road south of Lucky Strike. 5/31-2/3-12-4. Improving road.
 Road Cardston to Hill Spring across Blood Indian Reserve. Culverts and improving.
- Road south of Lumpy Butte, section 20/21-2-24-4. Improving road.
 Road South-west of New Dayton. 19/20-5-18-4. Repairing road.
 Road North-east of Tyrol Lake. 28/29-5-17-4. Improving road.
 Road North-east of Hill Spring, N. section 9/10-4-27-4. Repairing road.
 Road South-west of Tyrol Lake, between section 13/14-4-18-4. Repairing road.
- Road South of Kipp Coulee, section 17/18-5-24-4. Culvert and repairing.
 Road South-west of Warner, section 28/29-3-17-4. Improving road.
 Road near Edzikon Coulee, section 16-5-11-4. Repairing road.
 Road running east of Lucky strike. 3/4-11-4. Grading and improving road.
- Road 9/10-5-11-4. Culverts, grading and improving.
 Road North boundary line between Medicine Hat and Cardston, township 4/5-11-4. Improving road.
- Road north-east of Weston, section 11/12-5-17-4. Grading road.
 Road North-east of Tyrol Lake, section 13/18-5-17/18-4. Improving road.
 Road North of Kipp Coulee, section 26/27-5-20-4. Culverts and improving.
 Road South-west of Magrath, section 16/17-5-22-4. Improving road.
 Road South-east of Tyrol Lake, section 10/15-5-17-4. Filling and culverts.
 Road North-east of Warner, township 4-16/17-4. Improving road.
 Road New Dayton East to Ebdry, 5-16/17-4. Culverts and improving road.
- Road 4-21-4. Improving road.
 Road East and West section 22/27-1-17-4. Culverts and repairing road.
 Road section 35/36-1-17-4. Grading and culverts.

Road West of Verdigris Lake, 21/22-3-16-4. Grading and improving.
 Road North of Masinasin, North of section 23-2-13-4. Improving road.
 Road 22/23-1-17-4. Culverts and improving road.
 Road North of section 27/28-4-25-4. Grading and improving.
 Road section 13/14, 14/24-2-13-4. Repairing road.
 Road East of Ferrintosh, section 34/35, township 43-20-4. Culvert and improving road.
 Road South of Daysland, 41/45-16-4. Improving road.
 Road East of Camrose, section 1/35-46/47-18/20-4. Grading and filling.
 Road East of Camrose, section 40/33-47/48-4. Improving road.
 Road West of Skafse, 46-20-4. Culverts and improving road.
 Road East of Skafse, section 3-49-20-4. Grading road.
 Road at Roundhill, section 48-19-4. Culverts and grading roads.
 Road East of Spilstead, 20/21-50-20-4. Improving road.
 Road West of Kingman, 48/49-20-4. Culverts and improving road.
 Road East of New Sarepta, East of 3-10-15-22, 49-21-4. Improving and levelling road.
 Road South of Gambling Lake, section 14-50-20-4. Improving road.
 Road North of section 22-49-20-4. Cutting and clearing road allowance.
 Road to Bittern Lake Section N, 30-46-21-4. Improving and grading road.
 Road on White Bush Trail, East and North-west to Bashaw. Improving road.
 Road west of Camrose, townships 46/47-20-21-4. Grading road.
 Road East and West of Meeting Creek, North section 2-3-4-43-19-4. Culverts and improving road.
 Road North of Michelin Lake, section 34-27-49-20-4. Levelling and improving road.
 Road West of Dried Meat Lake, 2-45-20-4. Improving road.
 Road North-east of Rosalind, North 23-44-17-4. Culvert and levelling roads.
 Road East of Pretty Hill, section 29 East 30-47-20-4. Grading road.
 Road South of Dried Meat Lake, section 11-12-45-20-4. Improving road.
 Road East and northeast of Macleod, section 25-30-9-26-4. Repairing road.
 Road 9-29-4. Improving road.
 Road North of Butte, section 8/17-9-26-4. Grading and improving.
 Road South of Mud Lake Creek, section 9-27-4. Grading and improving road.
 Road North-east of Mud Creek, East section 2/35-10-27-4. Grading road.
 Road West of Camforth, between 1/12-11-28-4. Culverts and improving road.
 Road North of Mud Lake, west of 9-26-4. Grading and improving road.
 Road North-east of Mud Lake, South of 14-26-4. Grading and levelling road.
 Road West of Old Man River, between 20/21-28/29-32/33-10-25-4. Culverts, filling and grading road.
 Road North of Mud Lake, between 32/33-9-27-4. Improving road.
 Road between sections 21/22-26-45-5. Improving road.
 Road between sections 32/33-26-4-5. Cochrane to Horse Creek. Improving and levelling road.
 Road between sections 27-3-5, Cochrane to Lochna P. O. Improving road and building subway.
 Road between sections 19/30-28-3-5. Road North Beaver Dam Creek. Improving road.
 Road between sections 26-4-5, crossing Big Hill Creek. Improving road.
 Road between sections 6/7-29-4-5, west of Dog Pound. Levelling road.
 Road North of 35-26-29-4. South-east of Airdrie. Levelling and improving road.
 Road section 3-26-4/5-5. Calgary-Morley Trail. Improving road.
 Road section 22-27-4-5. Levelling, Grading and improving road.
 Road South of Westcott, township 32-3-5. Improving road.
 Road between 35/2-30/31-5-5. Corduroying over Muskeg.
 Road across section 16/17/18/24-29-25/24-4. Grading, levelling and improving road.
 Road between 34/35-29-23-4. Improving road North of Carbon.
 Road between 22/27-25-4-5. Levelling road.
 Road township 25/28-1/3-5. Improving road of Nose Creek Bush Trail.
 Road section 18-25-4. Levelling road on Knee Hill Trail.
 Road between sections 6/31-23/24-22-4. Improving road North from Gleichen.

Road from Gleichen to Cluny, 17/18-22-21/22-4. Grading slough and improving road.

Road North of Cluny, section 21-22-21-4. Grading road.

Road section 2/3-24/26-4. Grading road south-west of Strawberry Creek and culverts.

Grading road to nuisance ground at Gleichen.

Improving road West of Strathmore.

Road North 21-22-23-4. Grading road and culverts North-east of Gleichen.

Road north of Stobart, section 33-22-23-4. Levelling road.

Road northeast of Gleichen to Dane Colony. Subway and improving road.

Road West of Gleichen, 10/15-23-22-4. Grading road.

Road West 16-21-28-33-22/21-4. Grading road North of Cluny.

Road 27-23/24-4. Grading road east of Rosebud River.

Road between sections 26/27-27-3-4. Culverts and improving road.

Road between sections 17/18-22-21-4. Grading road West of Cluny.

Road between sections 2/3-24-27-4. Grading road North of Langdon.

Road between sections 3/4-24-26-4. Improving road south-west of Cheadle.

Road West of 16-28-23-4. Improving road and putting in culverts on north and south roads.

Road between 7/8-28-25-4. Putting in Culverts East of Belseker.

Road section 23-28-4. Filling and improving culverts South-east of Sheppard.

Road section 5/8-22-12-4. Improving road to ferry.

Road between sections 33/34-32/33-18-29-4. Grading road from High River to Pekisko.

Township 19-27-4. Grading road North of Blackie.

Road between sections 14/15-29-1-5. Filling, grading and levelling road.

Road between sections 25/30-36-27/28-4. Improving road South of Penhold.

Road, section 36-28-4. Improving road to bridge near Penhold.

Road 21/24-14/18-4. Culverts and levelling road in Bassano district.

Road between sections 2/3-10/11-40-28-4. Grading road South of Wiesville.

Improving road Lacombe to Gull Lake.

Road sections 40/41-22/25-4. Improving road North of Alix.

Road township 40-26-4. Grading road East of Lacombe.

Road between sections 19/30-39-27-4. Grading road West of Blackfalds.

Road between sections 24/25-39-26-4. Grading road North-west of Canyon.

Road between sections 10/11-39-24-4. Improving Road South-east of Haines.

Road South of 14-41-27-4. Grading and improving corduroy road.

Road between sections 22/27-41-27-4. Improving East and West roads.

Road between sections 17/18-41-2-5. Improving road and work South of bridge.

Road between sections 22/27-39-23-4. Improving road and culverts.

Road between sections 7/11-40-25-4. Grading and levelling road South-east of Lacombe.

Road North 7/12-41-3-5. Improving road South-west of Lockhart.

Road 1/6-7/12-39/40-26/27-4. Grading, levelling and repairing road.

Road 31-41-25-4. Improving road.

Road between sections 4/5-40-27-4. Grading road West of Lacombe Lake.

Road North 36-35-34-39/40-23-4. Culverts and improving road Alix to Pleasant Valley.

Road, Blind Line South-west of 11-41-27-4. Corduroying and improving road.

Grading road Eckville to Gilby and Wittenburg.

Road from White Whale Lake to Lac Ste. Anne. Improving road.

Road between sections 36/31-53-6/7-5. Clearing and corduroying road.

Road between sections 21/22-54-2-5. Corduroying road.

Road between sections 10/11-55-3-5. Corduroying slough and improving road.

Road township 54-14-5. Grading and improving road from Peers to Shining Lake.

Road North of 29/30-53-13-5. Grading and levelling road South of Carrot river.

Road between sections 33/34-5/6-22-4. North of Magrath. Improving and filling roads.

Road West of section 19, 7-20-4. Stirling to Lethbridge putting in Culverts and improving road.

- Road between sections 2/3-34/35-6-22-4. Road West of Welling. Repairing road.
- Road between sections 17/18-29/30-6-20-4. North of Raymond. Improving road.
- Road township 9-20/21-4. South and West of Coaldale. Putting in culverts and fixing road.
- Road between sections 21/22-27/28-32/33-7-21-4. Grading hills and sloughs.
- Road between sections 31/36-11-21-4. Road North-west Diamond City. Culverts and improving road.
- Road township 13-21-4. Bar Hill to Diamond City. Putting in bridge and grading road.
- Road between sections 3/34-11/12-22-4. North Albion Ridge. Putting in culverts and filling.
- Road between sections 24/25-W 1-2 23 and 26-6-20-4. Grading and improving slough.
- Road between sections 8/17-6-19-4. Road East of Raymond. Filling and improving road.
- Road between sections 20/29-30/19-6-17-4. North of Elzikon Coulee. Culverts and improving road.
- Road between 20/27-11-21-4. South of Blackspring. Repairing road.
- Road between sections 8/9-19/20-4. South of C. P. Ry. Filling road.
- Road between sections 5/6-31/32/14-22-4. Grading, filling improving.
- Road between sections 1/4-9-21-4. Grading, filling and improving road.
- Road between 35/36-7-17-4. Chin Coulee to Taber. Grading and filling road.
- Road between 10-14/15-4. North-west Purple Spring. Improving road.
- Road 12-22-4. North Albion Ridge. Culverts filling and grading.
- Road between sections 13/18-24/19-25/30-9-20/21-4. West of Coaldale. Repairing road.
- Road between 1/2-11/12-13/14-6-22-4. West of Welland. Repairing and fixing.
- Road between sections 14/15-22/23-6-21-4. North Irrigation Canal. Grading road.
- Road between sections 36-6/7-21-4. West of Irrigation Canal. Filling and improving road.
- Road East half 19/30-10-22-4. Grading and filling road.
- Road south half 27/28-9-22-4. Culverts, filling and levelling road.
- Road between sections 9/12-6-20-4. East of Raymond. Grading road.
- Road 12-17-4. Culverts, filling and levelling road.
- Road between sections 27/28-6-20-4. North of Raymond. Improving road.
- Road between sections 12-19-20-4. Putting in culverts and improving road.
- Road between sections 10/11-22-4. South-east Albion Ridge. Repairing road.
- Road between sections 10/15-11-22-4. North of Kehoe. Fixing road.
- Road between sections 2/3-12-22-4. Ploughing and filling road.
- Road North of 24-13-22-4. Grading road.
- Road between sections 5/6-11-19/4. North of Belly river. Putting in culverts and improving road.
- Road between sections 22-27-10-12-4. North of Burdett. Grading and improving road.
- Road between sections 15/16-21/22-27/28-17-18-4. West of Kinnondale. Putting in Culverts and improving road.
- Road between sections 21/22-12-21-4. Improving road.
- Road section 3-12-17-4. Culverts and grading road.
- Road between sections 19/20-11-19-4. Fixing pot hole.
- Road 17-17/18-4. East and West Bow City. Filling low places and placing culverts.
- Road between sections 25/26-10-12-4. North of Burdett. Improving road.
- Road between sections 6-17-4. North of Warner. Improving and levelling road.
- Road, section 36-14-22-4. Culverts, grading and improving road.
- Road between sections 19/30-24/25-11-22-4. South of Albion Ridge. Grading road.
- Road between sections 1/2-11-11-4. North of Bow Island. Repairing road.
- Road between sections 2/3-11-11-4. North-west of Bow Island. Putting in bridge and culverts.
- Road between sections 3/34-10/11-11-4. North of Bow Island. Culverts and repairing road.

Road South of 3/34-5/6-19-4. South of Stirling. Filling and levelling road.

Road between sections 16/17-9-15-4. East of Horsefly Lake. Clearing road and putting in culverts.

Road East of 5/32-20-23-4, through Indian Reserve. Improving road.

Road 1/6-11-10/11-4, North-east of Bow Island. Repairing road.

Road between sections 36/25-6-12-4. Near Chin Coulee. Repairing road

Road 17-17-4. East of Kinnondale. Improving road.

Road between sections 28/29-6-11-4. North of Chin Coulee. Levelling and filling road.

Road West 8-17-20-29/32-6-19-4. South-west of Stirling, culverts and improving road.

Road between sections 19-24-25/30-6-20/21-4. North-west Raymond. Filling and levelling road.

Road between sections 4/5-8/9-16/17-20/21-12-17-4. Improving and levelling road.

Road between sections 34/35-11-17-4. Culverts and improving road.

Road between sections 33/34-10-11-4. West of Bow Island. Filling and repairing road.

Road between sections 1/2-7-21-4. West of Irrigation Canal. Repairing road.

Road between sections township 9/10-12-4. West of Forty Mile Coulee. Culverts and filling road.

Road between sections West of 13-24-25, 6-21-4. West of Raymond. Improving road.

Road between sections 36/31-11-20/21-4. South-east of Blacksprings. Repairing road.

Road between sections 31/6-11/12-20-4. North of Iron Springs. Repairing and filling road.

Road between sections 8/9-16/17-11-20-4. West of Ironsprings. Improving road.

Road between sections 11-11-20-4. South-east of Ironsprings. Levelling road.

Road between sections 33/34-3/4-9/10-16-17-4. Repairing road.

Road between sections West of 6-9-19-4. Repairing road.

Road between sections 5-6-7-8-9-19-4. South of C. P. Ry. Grading road.

Road between sections West of 11-19/20-4. East of Iron Springs. Filling road.

Road between sections 12/13-17-4. Grading road.

Road between sections North of 12-17-4. Improving road.

Road between sections 25/26-6-17-4. Grading road.

Road, township 8/9-15-4. Culverts and grading road.

Road between sections 12/13-14-22-4. Levelling and improving road.

Road between township 7-11-4. Grading road.

Road east of 22-27-24-10-11-4. Levelling road west of Bow Island.

Road west of 16-21-28-33-6-21-4. Road North of Welland. Grading road.

Road north 10/11-9-12-4. West of Forty Mile Coulee. Grading road.

Road 14/17-9-11-4. Improving road.

Road between sections 5/6-7-11-4. Grading road.

Road between sections 3/34-13/14-19-4. North-east of Sundial. Grading and improving road.

Road East of 2/35-13/14-19-4. East of Sundial. Improving road.

Road North of 19/24-12-17-4. Repairing road.

Road, township 7-11-4. Grading and levelling road.

Road between sections 1/2-9-16-4. Road South of Horsefly Lake. Grading road.

Road between sections 8/9-9-16-4. Road West of Horsefly Lake. Improving road.

Road between sections 27/28-33/34-7-20-4. Improving road.

Road east of 20-29-32-13-22-4. Levelling road.

Road 49-50-3-5. One mile east Poker Hasset. Corduroying slough.

Road, blind line west of Leduc. Improving road.

Road West section 30-49-25-4. Road West of White Mud Creek. Grading road.

Road between sections 12/13-48-23-4. Road south of Big Hay Lake. Grading and filling road.

Road township 49-24-4. Road North of Sara. Levelling road.

Road between sections 12/13-8/17-50-26-4. Levelling and improving road.

Road between sections 3/4-9/16-50-25-4. Road East of White Mud Creek. Filling and levelling road.

Road between sections 11/12-1/2-49-26-4. Road east of Conjuring Creek. Filling and levelling road.

Road between sections 3-4-9/10-48-24-4. Road North-east of Millet. Levelling and improving road.

Road west of 49-26/27-4. Repairing road.

Road 8/9-10/15-48-22-4. Road south-east of Big Hay Lake. Grading road.

Road between sections 11/12-48-23-4. Levelling and filling road.

Road south of 2-3-4. 50-24-4. Road north-east of Telford Lake. Culverts and improving road.

Road between sections 4/5-49-26-4. Road east of Conjuring Creek. Repairing road.

Road south-east of 19-9-23-4. Grading hill.

Road between sections 2 and 35-7/8-26-4. Grading and repairing road.

Road between Medicine Hat and Josephburg Trail. Grading and levelling road.

Road south-east of Woonchester. Grading road.

Road between sections 6/31, 3/34, 9/10, 3/2, 4. Grading and levelling road.

Road between 15-10-4. 33-34. 9/10-4-4. Improving road.

Road north of Graham. 9/10-1-4. Improving road.

Road east of seven persons. 10-7-4. Levelling road.

Road between Elkwater and Medicine Lodge. 8-3-4. Improving road.

Road north-east of Medicine Hat. 13-4/5-4. Grading and fixing road.

Road south of Whitlea. Section 19/20-10-8-4. Grading and levelling road.

Road, section 1, township 11-3, west of the 4th meridian. Grading and improving road.

Road south of Winnifred. 6/31-10/11-10-4. Grading and improving road.

Road south-west of Whitlea. West of township 9/10-8-4. Improving road.

Road south of Suffield, township 15-17-9-4. Repairing road.

Road east and north-east of 15-6-7-4. Grading road.

Road between sections 12/13-6-7-4. Grading and levelling road.

Road north of 36-31-4-9-4. Grading and repairing road.

Road west of section 19 and 30-5-9-4. Improving road.

Road between sections 25/26-4-10-4. Grading road.

Road between sections 8/9-16/17-3-9-4. Improving road.

Road west of township 5/4-9-4. Repairing road.

Road between sections 24/25-12-10/4. Grading and levelling road.

Road west of 19/31-11-9-4. Grading and fixing road.

Road across Forty Mile Coulee. Section 14-7-9-4. Culverts and improving road.

Road between 19/20-17/18-11-7-4. Grading and repairing road.

Road between 12/13-9-4-4. Repairing road.

Road between sections 3/34-15/16-28-4. East of Nanton. Repairing road.

Road between sections 33/34-25/24-15/16-28/30-4. East of Parkland. Grading and improving road.

Road west of Stavely. 14-28-4. Grading and improving road.

Road between township 15-25-4. East of Lawrence. Grading and improving road.

Road between sections 12/13-16-28-4. South of Nanton. Grading and repairing road.

Road between township 15-29-4. West of Nanton. Repairing road.

Road between sections 24/25-15-30-4. West of Nanton. Grading and improving road.

Road from Calgary to Millarville. Grading, levelling and improving road.

Road east and south of sections 2/3, townships 23/24-R, 3/4-5. Old Mission trail, Calgary. Culverts and grading.

Road between sections 2/27-21-29-4. North of Grierson. Culverts, grading and levelling road.

Road between section 3 township 21/22-29-4. Cable Hill. Grading and improving road.

Road sections 20/21-23-1-5. North of Midnapore. Grading and improving road.

Road west of C. P. Ry. north of Midnapore. Grading and levelling road.

Road sections 11/14-12/13-10/15. Township 34-2-5. East of Olds Creek. Grading and levelling road.

Road North of sections 32/33-33-28-4. West of Bowden. Culverts and grading road.

Road between sections 29/20-34-22-4 on road allowance south of Perbeck. Grading road.

Road sections 13/14-23/24-34-26-4. Grading road and cutting down hills.

Road sections 12/13-23-29-4. South of Bowden. Grading roads.

Road townships 32/33-23-4. West of Trochu. Improving road.

Road between sections 9/16-34-25-4. North of Three Hills Creek. Improving road.

Road between sections 27/28-34-1-5. West of Bowden. Grading and improving road.

Road between sections 15/16-50-17-4. Corduroying from Victoria North via Smoky Lake.

Road between sections 24/25-23/26-59-17-4. Grading and improving road south of Smoky Lake.

Road between sections 18/19-13/14-19/30-59-8-4. Grading road from St. Paul de Metis to Moose Lake.

Road between sections 27/34-58-11-4. Grading road at Cork P. O.

Road west section 7-57-10-4. Grading road east of Lafond.

Road between 9/16-58-8-4. Corduroying culverts and grading.

Road between 10/15-9/16-17/18-61-5-4. Improving and grading road west of Durlingville.

Road between 7/12-58-8/9-4. Grading two sloughs.

Road between 13/14-59-9-4. Cutting brush and small timber at St. Paul de Metis.

Road between 19/30-59-9-4. Cutting brush and repairing road at St. Paul de Metis.

Road between 67/68-13/14-4. Grading and improving road around east end Lac La Biche.

Road between 19/20-29/30-31/32-57-8-4. Grading and improving road.

Road between 22/27-21/28-20/29-57-5-4. Grading and improving road.

Road between 16/17-56-12-4. Grading and improving road.

Road between 5/8-61-5-4. Improving road.

Road between 24/25-25/26-60-10-4. Grading and improving road.

Road between 19/20-29/30-59-17-4. Repairing and levelling road.

Road between 1/36-36/31-59/60-2/3-5. Repairing and grading road.

Road between 24/3-58/59-2-5. Improving road.

Road from Seymour to Belvedere and Lowtor. Improving road.

Road between sections 21/28-57-2-5. Corduroying swamps from Belvedere to Edmonton.

Road between 7/12-59-3-5. Road south of Paddle river. Grading and improving road.

Road between 17/18-58-3-5. Corduroying and draining swamps, Moss side to Belvedere.

Road between 22/27-58-2-5. Hauling logs for small bridge and construction.

Road 56-1/2-5. Road from Zion to Onoway. Culverts, grading and improving road.

Road 58/59-5/6-5. Corduroying on the Peavine trail.

Road from Lunnford to Paddle river. Grading and improving road.

Road between 24/25-60-1-5. Road north-east of Pembina. Grading and repairing road.

Road between 2/3-59-2-5. Corduroying and clearing road.

Road 60-3/4-5. Road Paddle river to Holmes Crossing. Grading road.

Road between 15/22-59-3-5. Grading road West of Paddle River.

Road from Cold Spring to Peace River. Grading road.

Road between 10/11-72-8-6. Grading road.

Road south half 14, 8-30-4. Building subway and building road.

Road 26-25-36. 4-30-4. Grading road south-west of Dry Fork.

Road 7-29-4. Repairing bridge over Old Man river to Tennessee school.

Road section 28-21-32-33. 42-24-4. Improving road.

Road between 21/22-21/28-44-27-4. Grading and improving road.

Road between 5/31-42/43-27-4. Grading and improving road north of Lochinbar.

Road, covering corduroy and muskeg, 41/43-1/5-5. West of Forshee.

Road section 8/9-43-25-4. Corduroying and repairing road.

Road section 26/27-43-27-4. Improving road.

Road 22-25-4. Road south-east of Ponoka. Culverts and repairing road.

Road section 34/35-44-2-5. Road north of Springdale. Grading and repairing road.

Road between 4/33-43/44-26-4. Corduroying and grading road.

- Road between 16/17-8/9-44-25-4. Grading road south-west of Indian lands.
- Road between 10/15-8/17-43-25-4. Corduroying and repairing road.
- Road south-west 8, 43-23-4. Building subway.
- Road 42-1-5. Repairing road south-east Rimbey.
- Road between 2/3-10/11-42-28-4. Grading road west of Iowalta.
- Road between 17/18-44-3-5. Improving road east of Iola.
- Road south of 18-42-23-4. Grading road north of Trinstram.
- Road between 1/2-34/35-42/43-26-4. Grading road leading to steel bridge over Battle River.
- Road section 29/33-38-22/23-4. Culverts, grading and repairing road.
- Road. Repairs on main road east of Red Deer.
- Road. Covering corduroy and grading two miles east of Eckville.
- Road sections 32/33-28/27-38-1-5. Grading south of Silver Lake.
- Road south-west 14-38-25-4. Building subway and grading road.
- Road township 39-3-5. Improvement of road south of Eckville.
- Road 37-25-4. Grading road south of Hillsdown.
- Road between sections 24/25-19/30-37-3-5. Grading road west of Evergreen.
- Road 9-10-11-38-23-4. Culverts and grading road east of Ardley.
- Road between 4/5-8/9-38-23-4. Improving road south of Ardley.
- Road between 4/31-54/55-26-4. Grading road north of Ray.
- Road township 55-26-4. Improving road south-west of Riviere Qui Barre.
- Road between 37/38-8/17-7/18-55-27-4. Grading road north of Lac St. Anne trail.
- Road sections 19/20-57-26-4. Improving road east of Independence.
- Road 55/56-26-4. Repairing road west of Morinville.
- Road between 36/31-57-25-4. Grading road from south-east mile to Athabasca Landing.
- Road 54-26-4. Grading road south of Hudson's Bay reserve.
- Road 53-25-4. Levelling road east of St. Albert trail.
- Road between 22/23-14/15-54-26-4. Culverts and repairing road south-east of Ray.
- Road township 54/55-25-4. Improving road north-east of Ray.
- Road 55-25-4. Improving road south-west of Cardiff.
- Road sections 7/8-17/18-31/32-57/58-24-4. Corduroying and grading road north-east of Legal.
- Road between sections 25/26-57-25-4. Repairing road allowance south-west of Legal.
- Road between 2/3-34/35-58-25-4. Grading road.
- Road between 16/17-57-24-4. Grading road west of Athabasca Landing.
- Road between 24/25-57-26-4. Clearing road, culverts north-east of Independence.
- Road 57-24-4. Culverts north of Diligence.
- Road between 2/3-56-25-4. Grading road east of Morinville.
- Road between 33/34-58-24-4. Improving road north of Diligence.
- Road between 31/32-5/6-53/54-26-4. Grading road.
- Road between 20/29-55-25-4. Improving road north of Cardiff.
- Road between 1/2-56-25-4. Grading road east of Morinville.
- Road between 24/25-56-27-4. Grading road through Indian lands.
- Road between 54-25-4. Repairing road east of St. Albert.
- Road between 54-26-4. Improving road south of Villeneuve.
- Road between 15/18-58-24/75-4. Improving road range line north of Legal.
- Road between 14/15-22/25-57-26-4. Grading road north-east of Egg Lake.
- Road between 4/34-56/57-25-4. Grading road east of Manawa Lake.
- Improvement of road south of Sturgeon river at St. Albert.
- Road between 24/25-44-15-4. Improving road Strome to Killam.
- Road 44-14-4. Grading road east of Strome.
- Road 40/44-13-4. Repairing and putting in Culverts south of Killam.
- Road 42/43-12-4. Grading and improving road west of McKay Lakes.
- Road north of 22-23-24-42-9-4. Grading road west of Rosyth.
- Road 14-43-10-4. Grading road north of Wetaskiwin.
- Road 38-9-4. Culverts and repairing road north of Talbot.
- Road 37-11/12-4. Building small bridge north of Haneyville.
- Road east 21-45-12-4. Improvement of road.
- Road east 20-45-12-4. Grading road west of Jackson Coulee.
- Road 40-6-4. Grading road east of Czar.
- Road 7-42-12-4. Improvement of road west of Mana.
- Road between 28/33-41-8-4. Grading road west of Amish.

Road between 19/20-30-8-4. Building approaches to Culverts north of Youngstown.

Road west 2/11-35-6-4. Culverts and improving road south of Consort.

Road between 9/10-35-6-4. Culverts and grading road south-west of Consort.

Road 41/42-12/13-4. Improvement of road east of Nivina.

Road between 3/34-34-10-4. Grading road, building culverts between Kilpatrick and Rob Lake.

Road 29-8/9-4. Improvement of road east of Logo Lake.

Road 7-44-10-4. Repairing road north-east of Loughheed.

Road between 14/15-42-12-4. Grading road north-east of Nivina.

Road between 11/27-40-8-4. Grading road west of Rosyth.

Road north of 43/44-13-4. Improvement of road south of Killam.

Road south-east of 21 to north-east of 9-42/43-8-4. Improvement of road.

Road between 33/34-46-13-4. Grading and improving road north of Prague.

Road between 34/35-13-4. Improving road north of Clement Lake.

Road between 29/32-43-13-4. Grading road South of Killam.

Road between sections 26/27-52-25-4. Grading road St. Albert to Edmonton.

Road between sections 24/25-52-28-4. Grading road east of Stoney Plain.

Road. Improvement of road south of Holborn's school, west to Inga.

Road between 19/30-52-25-4. Improvement of road Stoney Plain to Edmonton.

Road between 32/29-51-3-5. Grading road west of Mewassin.

Road 30-51-1-5. Grading road west of Inga.

Road between 26/27-51-26/27-4. Improvement of road from Gramina school to Spruce Grove station.

Road between 53/54-1/2-5. Grading road north-east of Manley.

Road between sections 24/25-51-26-4. Corduroying road west of Wood-bend.

Road between sections 34/35-53-25-4. Repairing road south of St. Albert trail.

Road between sections 18/19-17/20-16/21-15/22-32/33-51-27-4. Grading road south-east of Golden Spike.

Road between 5/6-31/6-51/52-25-4. Corduroying and culverts on Indian reserve.

Road. Grading and improving road from Stettler to Erskine.

Road between 39-2-4. Improving road north of Nevis.

Road between 39-16-4. Grading road south Paint Earth Creek.

Road between sections 37-9-37-17-4. Grading main road to Gadsby.

Road between sections 27/35-29-21-4. Improving Ferry Landing east of Carbon.

Road north of 1-39-22-4. Grading road north-west of Nevis.

Road section 5-30-18-4. Grading road and culverts south of Delia.

Road between 11/14-24-13-4. Improving road east of Deadfish Creek.

Road between 1/26, township 27/28-18-4. Grading road south of Willow Creek.

Road 31/32-18-4. Repairing road one mile west of east boundary.

Road north 7/8-31-14-4. Culverts, grading and improving road north of Hanna.

Grading and improving road on Dowler's Hill.

Road between 3/4-51-24-4. Improving road south of Ellerslie.

Road between 12/13-51-24-4. Corduroying and grading road south-west of Irvine Lake.

Road between 32/33-51-24-4. Improving road north-west of Ellerslie.

Road 52-23/24-4. Repairing road on Blind Line, Strathcona, towards Clover Bar.

Road between 11/14-53-21-4. Grading road east of Clover Bar.

Road between 5/6-52-24-4. Brushing sloughs and low ground.

Road between 4/5-52-24-4. Improving road south of Strathcona.

Improving and grading road south of Carvel.

Road between 13/14-53-21-4. Improving road east of Coppice Hill.

Road between 14/15-51-21-4. Grading and improving road.

Road west of 3/10-51-21-4. Grading road.

Road between 15/16-10/15-11/14-12/13-52-21-4. Repairing road west of Uneas.

Road, river lot 21, 53-24-4. Grading approach to Marjorie St. Bridge East Edmonton.

Road township 65/66-22/23-4. Improving road south of Athabasca Landing.

Improving and grading road north of Cutbank Lake.

Road 56-23-4. Improving road north from bridge over Sturgeon river.

Road between section 4/5-55-23-4. Improving north and south road.

Road. Grading road from Victoria trail to Ferry north of Lamont.

Road. Grading road north to Clyde.

Road, section 11-12-13, 59-19-4. Corduroying and culverts.

Road, section 27/28-55-23-4. Improving road south of Lunnon.

Road between 8/9. Improving road north from Victoria trail.

Road south-west 13-57-23-4. Grading road south of Fedora.

Road 57/58. Corduroying road north of Maybridge.

Road 56-22-4. Improving road east of Sturgeonville.

Road, 1-2-3, 59-19-4. Grading road north of Pine Creek.

Road, section 19/20-57-23-4. Covering corduroy on road west of Fedora.

Road, section 24-65-21/22-4. Improving road west of Stocks.

Road, grading road Battenberg south to connection line.

Road between 16/21-65-21-4. Improving road south-west of Stocks.

Road between 11/12-57-22-4. Corduroying and brushing road west of Red Water.

Improving road from Jack Edmonton, thirty-five miles from Athabasca Landing.

Road 60/61-23/24-4. Grading road south of Tawatinaw.

Road 1-12-13, 67-21/22-4. Grading road north-east of Athabasca Landing.

Road between 66/67-22-4. Clearing road north of Athabasca Landing.

Work on road allowance Athabasca Landing to Winter trail.

Road, section 4/5-59-19-4. Grading road north-west of Pine Creek.

Road township 58-18-4. Grading road north of Lobstock Settlement.

Road township 58-23-4. Improvement of road south of Waugh.

Road section 34-61-21-4. Grading road west of Stoney Creek.

Road north-east 21-61-24-4. Grading road west of Tawatinaw.

Road between 22/23-14/15-65-22-4. Improving road to Tawatinaw river.

Road section 29/30-53-16-4. Improving road and putting in culverts at

Mundare.

Road between sections 30/35-56-13/13-4. Corduroying road to the south.

Road between sections 15/16-56-14-4. Covering corduroy on lake south of Dejarlais.

Improvement of east road between Riley and Bardo.

Road between sections 14/15-56-14-4. Grading road south of Dejarlais.

Road township 49-15/16-4. Grading road from Vegreville to Holden.

Road between sections 2/35-53/54-19-4. Improvement of road to Chipman.

Road between sections 12/13-49-19-4. Grading and improvement of road north of Kingman.

Road between sections 22/27-54-19-4. Corduroying and grading on road east of Chipman.

Road between sections 16/21-46-11-4. Grading road south of Kinsella.

Road township 50-19-4. Grading road south-west of Tofield.

Road between sections 11/12-13/14-56-15-4. Grading road north of Hairy Hill.

Road between sections 23/24-49-16-4. Grading road north of Holden and putting in culverts.

Road between sections 28/29-54-15-4. Repairing road.

Road township 51/52-11-4. Improvement of road north of Innisfree.

Road between sections 36/1-19/30-44/45-10/11-4. Improvement of road west of Duverney.

Road between sections 7/8-9/16-10/15-11/14-12/13-53-12-4. Grading road south of Plain Lake.

Road between sections 12/13-50-10-4. Grading Hill south-east of Minburn.

Road between sections 21/22-15/16-3/4-53-9-4. Improvement of road north of Myrnam.

Road between sections 25/26-46-7-4. Improving road at Crossing of Buffalo Coulee.

Road, townships 50/51-10-4. Culverts and repairing road east of Innisfree.

Road townships 54/55-10/11-4. Grading road north of Musidore.

Road between townships 52/53-9-4. Grading road west of Lake Emilan.

Road township 49-8-4. Culverts on road near Colter.

Road, township 55-12-4. Improvement of road south of Duverney.

Road north of section 2 and west of 4, 55/54-7-4. Grading road south of Lake Cota.

- Road between sections 5/32-6/31-53/54-12-4. Grading road and putting in culverts north of Plain Lake.
- Road west section 7-51-7-4. Putting in culverts north of Claysmore.
- Road between 19/20-52-9-4. Putting in culverts on road north of Chailey.
- Road north and west of section 32-51-9-4. Improving and fencing around sloughs.
- Road between 2/3-51-9-4. Grading road north of Manville.
- Road between 30/31-49-6-4. Grading road across Grizzly Bear Coulee.
- Road north 22, 54-21-4. Grading road north-west of Beaver Hills.
- Road between 7/18-8/17-55-20-4. Cutting out road south-west of Bruderheim.
- Road between 55/56-19-4. Improvement of road east of Star P. O.
- Road between 24/25-55-22-4. Grading road along Saskatchewan river from Beaver Hills Creek.
- Road between 34/35-55-21-4. Grading slough north-east of Scottford.
- Road between 4/33-3/34-56/57-16-4. Grading road north of Andrew.
- Road between 25/26-55-21-4. Improving road north-east of Beaver Hills.
- Road between 4/5-55-19-4. Repairing road south of Lamont.
- Road north 56/58-18/19-4. Grading road.
- Road between 26/27-55-20-4. Repairing road south-east of Bruderheim.
- Road between 6/31, 55/56-18-4. Grading road east of Star.
- Road between 7/12-56-20/21-4. Improving road west of Bruderheim.
- Road between 7/34-57/58-16-4. Grading road South of Wesleyan Methodist Mission.
- Road between sections 28/29-56-17-4. Grading slough on road east of Wostock.
- Road between sections 1/36-2/55-55/56-21-4. Improving road west of Bruderheim.
- Road between sections 19/24-1/6-56-16/17-4. Repairing road West of Andrew.
- Road between sections 31/36-25/30-56-19/20-4. Improving road east of Beaver Hills.
- Road between sections 29/30-31/32-55-19-4. Grading road east of Bruderheim.
- Road between sections 15/16-54-22-4. Repairing road west of Partridge.
- Road between sections 20/21-28/29-54-20-4. Grading slough east of Beaver Hills.
- Road between sections 25/26-35/36-55-19-4. Cutting out road north-east of Lamont.
- Road between sections 1/2-56-17-4. Improvement of road south-east of Andrew.
- Road between sections 11/12-57-17-4. Grading road north-east of Lime-stone.
- Road. Improvement of road, Calgary and Edmonton trail.
- Road. Grading road between Wetaskiwin and Pigeon Lake.
- Road. sections 8-11-14, 42/46-23-4. Grading road and fixing sidehills to bridge over Battle river.
- Road between sections 24/25-46-25-4. Putting in culverts and improving road north of Brightview.
- Road, east of 3 and 10, south of 1 and 2, south of 1 and 6-47-24/25-4. Improving road south of Big Stone.
- Road north of 33-45-26-4. Improvement of road.
- Road North of 9, 10, 11 and 12-47-25-4. Repairing road.
- Road between sections 33/34-27/28-21/22-16/15-15-10-44-23-4. Grading road south of Louisville.
- Road between sections 35/36-46-22-4. Improving road from Bittern Lake west.
- Road, north 18, west and north of 20 and 21, 45-27-4. Grading road north from Chesterwold.
- Road between 7/12-47-23/24-4. Improving road east of Big Stone.
- Road, townships 45-26-4. Grading and improving road west of Indian lands.
- Road between 10/15-9/16-47-24/28-4. Grading road and putting in culverts on Pigeon Lake Trail.
- Road between 3/34-4/33-46/47-3-5. Grading and clearing road west of Battle Creek.
- Road section 6, 46-1-5. Improving and clearing road west of Battle Lake.
- Road section 24, 45-1-4. Improving road from Westeros P.O. and south.
- Road, township 46-26-4. Grading road west of Indian lands.
- Road, township 45/46-28-4. Grading road south of Westeros.

Road, south of 30, 45-22-4. Improving road north of Battle river.
 Road, township 45-27-4. Grading road south-east of Falun.
 Road between 18/19-19/20 and across 29, 46-26-4. Grading road north-west from Ben Hill Lake.
 Road, south of 28/30-47-23-4. Clearing road, putting in culverts on Trail north of Cormier Lake.
 Road between 24/25-46-3-5. Grading road between Battle Lake and Buck Lake.
 Road, township 46-3-5. Improvement of grades to bridge.
 Road between 44/45-22-4. Improvement of township line north of Louisville.
 Road between 23/24-25/26-47-23-4. Grading road east of Cold Lake.

TRUNK ROADS, 1912

Trunk road construction was undertaken on the following main roads:

From Lloydminster north on fourth meridian.
 From Kitscoty south to Battle River.
 From Moose Ferry to Landonville and Vermillion.
 From Edson to Grand Prairie.
 From Grouard to Sturgeon Lake.
 From Grouard to Peace River Crossing.
 From Old House to Fort McMurray.
 From Athabasca Landing to Lesser Slave Lake.
 From Grouard to White Fish Lake.
 From Lethbridge to Cardston.
 From Macleod to International boundary.
 From Ohaton north to Tofield.
 From Bawlf north and south.
 From Camrose east and west along C. P. Railway.
 From Daysland south to Battle River.
 From Daysland north towards Holden.
 From Camrose south via Ferintosh.
 From Camrose north by Pretty Hill.
 From Edberg to Donald and east to Battle River.
 From Bashaw east and west.
 From Macleod to Porcupine Hills.
 From Macleod to Lyndon.
 From Macleod to Granum.
 From Granum to Carnforth.
 From Macleod north-east road.
 From Granum east to Noble.
 From Stavelly to Willows.
 From Lyndon Trail up Shaffer Creek.
 From Calgary to Kananaskis north of Bow River.
 From Mitford up Horse Creek to the Dog Pound.
 From Airdrie running east.
 From Airdrie west to Lochend.
 From Morley Trail north to Lochend.
 From Jackville via Cremona to Little Red Deer River.
 From Calgary to Edmonton.
 From Didsbury to Elkton and west.
 From Rosebud to Bergen and west.
 From Carbon east to Red Deer River.
 From Carstairs to Swallowell and east.
 From Gleichen to Cluny.
 From Bassano to Fieldholm Ferry.
 From Beiseker to Drumheller.
 From Calgary to Gleichen.
 From Brooks south-west to Bow River.

From Calgary to Macleod.
 From High River to Longview and south-west.
 From Innisfail to Clearwater River, via Raven.
 From Innisfail to Mountain House and west.
 From Penhold east via Pine Lake and Lousana.
 From Innisfail east via Lakeview and Perbeck.
 From Eckville to Gilby and Wittenberg.
 From Lacombe west via Bentley and Gilby.
 From Lacombe east to Mirror.
 From Edmonton to Lac Ste. Anne.
 From Lac Ste. Anne to the mouth of the Macleod river.
 From Entwistle south towards Rocky Rapids.
 From east end of Lac Ste. Anne, north, towards Lac La Nonne.
 From Edson leading north.
 From Lac Ste. Anne to Wabamun.
 From Carvel to Onoway and north.
 From Edmonton to Entwistle.
 From Raymond to Magrath.
 From Macleod to Lethbridge.
 From Lethbridge to Stirling.
 From Stirling leading east.
 From Carmangay east to Little Bow River.
 From Kipp to Albion Ridge.
 From Lethbridge north via Iron Springs.
 From Burdett leading south.
 From New Dayton leading east.
 From Bow Island south towards International boundary.
 From Taber to Minott and west.
 From Lethbridge to Taber and Bow Island.
 From Leduc to Telfordville and west.
 From Leduc leading east.
 From Saron leading east and west.
 From Millet to Bonnie Glen and Fisher Home.
 From Macleod to Pincher Creek.
 From Macleod leading south by Rathwell School.
 From Old Man River to Belly River on third base line.
 From Macleod to Orton.
 From Pearce to Orton and south.
 From Medicine Hat to Carlstadt.
 From Medicine Hat to Josephsburg.
 From Medicine Hat to Coleridge.
 From Irvine south to Cypress Hills.
 From Walsh to Grayburn.
 From Medicine Hat to Medicine Lodge.
 From Bullshead Station to Medicine Hat.
 From Irvine to Walsh.
 From Irvine to Josephsburg, west road.
 From Grayburn south to Cypress Hills.
 From Medicine Hat west, south of the river.
 From Whitla north to the south Saskatchewan river.
 From Medicine Hat to the International boundary via Minda.
 From Seven Persons north to South Saskatchewan river.
 From Medicine Hat leading north-east.
 From Irvine north to Hilda.
 From Seven Persons south, east road.
 From Carlstadt leading north.
 From Seven Persons south, west road.
 From Lucky Strike to Lake Pakowi.
 From Redcliff leading north.
 From Carlstadt leading east.
 From Larmour station south.
 From Walsh to Many Island Lake.
 From Minda to Thelma.
 From Medicine Hat to Irvine—telephone line.
 From Altorado running east and west.
 From Altorado to Goddard.
 From Avalon leading west.
 From Avalon to Faith and north.
 From Medicine Hat to Seven Persons.

From Nanton to Kircaldy.
From Nanton west on Muirhead trail.
From Nanton leading south-west.
From Willows north to Nanton road.
From Calgary to Morley via Springbank.
From Okotoks to Sandstone and north.
From Bowden to Red Deer River and west.
From Ghost Pine station leading east.
From Boyne Lake to Lac La Biche.
From Lac La Biche to Athabasca Landing.
From St. Paul de Metis to Cold Lake via Durlingville.
From St. Paul de Metis to Boyne Lake via Clarkville.
From Wahstao leading east and west.
From Cork leading east.
From Elk Point to Bonnyville.
From Frog Lake to Cold Lake.
From Mosswa leading north.
From Mosswa to Frog Lake.
From Elk Point to St. Paul de Metis.
From Durlingville north to Beaver river.
From Belvedere to Holmes Crossing.
From Sion leading east and west.
From Glenford to Manola.
From Sunniebend to Pickardville.
From Clyde to Dusseldorf and west.
From Edmonton to Clyde via Morinville.
From Belvedere to Mosside.
From Peace River Crossing to Dunvegan.
From Dunvegan to Beaver Lodge via Spirit River.
From Ponoka to Wood River and east.
From Wittenberg north towards Iola.
From Ponoka to Blindman River and west.
From Buckhorn to Springdale via Homeglen.
From Pincher Creek into Crows Nest Pass.
From Red Deer to Hillsdown and east.
From Red Deer to Rocky Mountain House.
From Red Deer to Evarts and west.
From Seymour to Egg Lake.
From Strome south to Battle River.
From Hardisty leading south-west.
From Killam to Strome.
From Sedgewick to Battle River via Flag Staff.
From Lougheed south, west road.
From Lougheed south, east road.
From Talbot to Coronation.
From Galahad leading west.
From Strome to Bruce.
From Castor to Coronation.
From Hardisty to Czar, along C. P. Railway and telephone line.
From Lougheed to Hardisty.
From Coronation south, east road.
From Erskine to Buffalo Lake.
From Stettler to Drumheller, via Big Valley.
From Big Valley to Gopherhead and east.
From Stettler to Donalda.
From Bullockville to Castor, via Stettler.
From Castor to Sullivan Lake and south.
From Munson to Hand Hills.
From Edmonton to Graminia, and west.
From Mewassin to Highville and west.
From Stony Plain to Noyes Crossing.
From Carvel south to Saskatchewan River.
From Seba to Tomahawk.
From Mewassin to Duffield and north.
From Edmonton west—Alberta Avenue west extension.
From Edmonton to Tofield.
From Athabasca Landing to Baptiste Lake.
From Edmonton to Athabasca Landing.
From Fort Saskatchewan to Namayo and west.

From Pine Creek leading north.
From Waugh leading east and west.
From Kinnoul east, south of Flat Lake.
From Lobstick Settlement to Smoky Lake.
From Namayo to Excelsior and north.
From Pine Creek to Smoky Lake.
From L'Amoureux to Eastgate and north.
From Edmonton to Pakan.
From Myrtle Creek leading north.
From Cookville to Radway Centre.
From Tofield to Bruce and east—telephone line.
From Vegreville to Desjarlais.
From Vegreville to Bruce.
From Mundare to Ryley and south.
From Vegreville to Brosseau.
From Chipman to Tofield.
From Chipman to Ranfurley.
From Mundare to Pakan via Andrew.
From Manville north to Saskatchewan river.
From Viking to Ranfurley and north.
From Vermillion to Hopkins Ferry.
From Vermillion to Wainwright.
From Minburn leading north and south.
From Fort Saskatchewan to Agricola.
From Andrew to Sunland and north.
From Fort Saskatchewan to Andrew.
From Bruderheim to Leeshore and north.
From Fort Saskatchewan to Chipman.
From Wetaskiwin to Duhamel.
From Wetaskiwin to Buck Lake via Battle Lake.

ARCHITECTURAL BRANCH

Staff	{	Architect Assistant architect Eight draftsmen One quantity surveyor Two stenographers
-------------	---	---

I have the honour to report that the Architectural Branch have, during the year, prepared the necessary designs, sketches, working drawings and details, specifications and estimates in connection with work under construction and uncompleted at the end of 1911, as follows: Parliament Building, Court House, Edmonton; Government House, Edmonton.

In addition to the above designs and drawings, plans were prepared for the New Court House, Calgary; Land Titles Building, Edmonton; Schools of Agriculture at Olds, Vermilion and Claresholm; Garage and Stables, Government House; extension to Central Telephone Exchange, Calgary; addition to East-end Telephone Exchange, Calgary; alteration to cell room, Lethbridge Jail; Dining-room and Heating Plant for University Building.

The work done in connection with the above is described in detail as follows:

PARLIAMENT BUILDINGS.

The drafting work in connection with this building consisted in completing detail drawings for interior woodwork and doors, and designs, sketches, working drawings and details for the marble work and plastering in rotunda and main staircase.

COURT HOUSE, EDMONTON.

Drawings and details for interior woodwork and doors were completed for this building.

GOVERNMENT HOUSE, EDMONTON.

The work on this building consisted of preparing designs, details and working drawings to complete all exterior stone work; the interior woodwork, doors and trim, plastering work, electrical work, steam fitting and plumbing and decoration.

GARAGE AND STABLES, GOVERNMENT HOUSE.

General plans and details for garage and stable have been prepared, as will be required to complete the building.

COURT HOUSE, CALGARY.

Work done on this building consists of designs, preparation of the working drawings and details for general construction, including masonry, steel, plumbing and heating, electric wiring, details of interior finish, doors, plastering, marble and tile work, specifications and estimates in connection therewith.

AGRICULTURAL SCHOOLS.

Complete plans, details, specifications and estimates in connection with the general construction and other trades, including electrical work, plastering, and interior finish necessary to bring same to completion, have been prepared.

ALTERATION TO CELL ROOM, LETHBRIDGE JAIL.

Plans and details have been prepared as will be necessary for the complete construction of alteration to the cell room.

CENTRAL TELEPHONE EXTENSION, CALGARY.

Complete plans, details and necessary specifications were prepared in connection with this extension.

EAST END TELEPHONE EXTENSION.

Complete working drawings were completed for the addition to the East End Telephone Exchange.

DINING-ROOM, HEATING PLANT OF BUILDING OF UNIVERSITY.

Complete plans and necessary details were prepared for the new dining-room with adjacent heating plant for dormitory buildings in connection with the building of University.

LAND TITLES BUILDING, EDMONTON.

Designs, sketches, complete working drawings and details were prepared in connection with the general construction, including steel work, masonry and concrete work for this building, and further details are in course of preparation to complete this building.

I have the honour to be, Sir,

Your obedient servant,

RICHARD P. BLAKEY,
Provincial Architect.

Deputy Minister, Department of Public Works.

BUILDING CONSTRUCTION

SIR,—I have the honour to report that during the year 1912 construction work on the various buildings uncompleted during the year 1911 has been carried on and in addition a considerable quantity of new work has been in progress; following is a detailed statement:

PARLIAMENT BUILDINGS.

The stonework on main dome and terra cotta covering were completed.

In the east wing hardwood and terrazzo floors were laid, plumbing, heating and ventilating system completed, wood trim completed, hardwood doors hung; the whole wing being ready for occupation at the end of the year.

In the west wing the second and third floors were brought to completion, the basement, first and fourth floors being within a short time of completion.

In the south wing the basement was completed and occupied and considerable work done in the legislative chamber and adjoining offices.

The rotunda and main staircase were practically completed with the exception of plastering and marble work.

The steel bridge over Saskatchewan Avenue was completed by the laying of cement roadway and sidewalks and bitulithic paving and was open for traffic early in September.

COURT HOUSE, EDMONTON.

This building was completed and occupied about the middle of the year.

LAND TITLES OFFICE, EDMONTON.

Excavation for this building was completed and basement walls erected.

GOVERNMENT HOUSE, EDMONTON.

All stonework was completed and building roofed in. All rough carpenter work and all rough plumbing was completed, heating boilers installed and plastering about half completed.

Excavation and footings were completed for garage in connection with Government House.

ASYLUM, PONOKA.

The Dormitory Building at this point was completed and turned over to the Provincial Secretary's Department for occupation and administration.

A number of small buildings were erected including ice house, cold storage house, sterilizer building, implement shed and chicken house. A new well to increase the water supply was dug and pump house erected over same, connecting with the present water tank. Excavation was taken out for the enlarging of septic tank. A fence was built around the quadrangle formed by the main building, dormitory building, power house and tunnel connecting power house and main building, and provides a very useful exercise ground for patients.

COURT HOUSE, WETASKIWIN.

Cement walks were laid in the Court House grounds at this point.

COURT HOUSE, CALGARY.

All steelwork was erected. All stonework with the exception of front entrance was completed; cement floors laid and building roofed in so that work on the interior could proceed during the winter.

CENTRAL TELEPHONE EXCHANGE, CALGARY.

An addition 50 ft by 30 ft. of steel and brick construction, comprising basement and three floors, was erected this year, providing accommodation for additional automatic equipment, rest rooms for operators and additional office accommodation.

EAST END TELEPHONE EXCHANGE, CALGARY.

A brick addition, 60 ft. by 28 ft. was erected this year providing additional accommodation for automatic equipment.

JAIL, LETHBRIDGE.

A seven-roomed brick house for the warden was erected and completed during the year. The capacity of the septic tank was increased by building another unit to the existing tank. A large barn was erected for horses. Work was commenced on the laying of a water main for the supply of water for domestic purposes from the city water system as at certain seasons of the year the present supply was found to be unsuitable.

FARM SCHOOL, CLARESHOLM.

Excavation was completed, concrete foundation walls built, rough frame completed, walls shiplapped, roof shingled and siding on walls partly completed.

FARM SCHOOL, OLDS.

Excavation was completed, concrete foundation walls built, rough frame completed, walls shiplapped, roof shingled and siding on walls partly completed.

FARM SCHOOLS, VERMILION.

Excavation was completed, concrete foundation walls built, rough frame completed, walls shiplapped, roof shingled and siding on walls partly completed.

I have the honour to be, Sir,

Your obedient servant,

P. N. JOHNSON,

Structural Engineer.

Deputy Minister, Department of Public Works.

SURVEYS BRANCH

EDMONTON, ALTA., December 31st, 1912.

JOHN STOCKS, ESQ.,

Deputy Minister of Public Works.

Edmonton, Alta.

SIR,—I have the honour to submit the following report regarding the work of the Surveys Branch for the past year.

The early part of the season was unfavourable for field work, being very wet, and progress was accordingly slow, but in the latter part of the year the weather was good, and on the whole a large amount of

work was done, as will be apparent from the General Summary which is appended hereto.

The increase in settlement becomes more marked each year and the work is constantly growing, and it appears absolutely necessary, if we are to keep pace with the work during the coming season, to add to our staff in the field.

One change was made in the field staff during the season. Mr. W. H. Young being appointed District Surveyor at Calgary to re-place Mr. P. N. Johnson, who had been appointed Structural Engineer.

Owing to the fact that the approval of proposed systems of subdivision of townsites for the whole province was brought under the jurisdiction of this department early in the year, a large additional amount of work has been given us, requiring some addition to the office staff.

Below is a general summary of the work in connection with road surveys, and the reports of the different district surveyors follow.

I have the honour to be, Sir,

Your obedient servant,

L. C. CHARLESWORTH,

Director of Surveys.

SUMMARY.

Surveys required and brought forward from 1911	573
Surveys asked for during 1912	689
Number of surveys and examinations made	590
Number of surveys found to be unnecessary on examination	60
Number of surveys made by district surveyors without instructions	137
Number of surveys not completed and carried forward to 1913 list	680
Plans prepared and filed in Land Titles Office	506
Certificates of title received for roads	381
Certificates of title received for building sites	2
Transfers issued covering roads no longer required	85
Amount paid as compensation for right-of-way, etc.	\$22,267.57

LEASE OF ROAD ALLOWANCES.

Number of new applications to lease road allowances	30
Number of applications granted	11
Number of applications not granted	19
Number of leases issued during the year 1912, including free leases issued as compensation for surveyed roads	128
Amount received as rental for leased roadways	\$372.00

SUMMARY OF WORK DONE IN THE VICINITY OF EDMONTON UNDER DIRECTION FROM THE OFFICE.

NEW ROADS.

New road in section 10.58-3-5.
 New road in sections 16/21/22-57-2-5.
 New road in section 7.57-2-5.
 New road in sections 14 to 18-59-4-5.

New road in sections 3/9/10-59-4-5.
 New road across section 36-57-23-4.
 New road along blind line north of section 30-57-22-4.
 New road across section 28-52-18-4.
 New road across section 35-54-23-4.
 New road across river lots 7/9, Fort Saskatchewan Settlement.

EXAMINATIONS.

Examination of road allowance north and east of section 26 along Saskatchewan River through section 26-55-22-4.
 Examination of road allowance west and north of section 10-54-19-4.
 Examination of road allowance west of section 8-53-23-4.
 Examination of road allowance north of section 21-56-2-5.
 Examination of road allowance west of section 16-57-23-4.
 Examination of road allowance north of sections 31/32/33-58-4-5.
 Examination of road allowance east and north of section 19-57-2-5.
 Examination of road allowance east of section 18 and east and north of section 19-58-3-5.
 Examination of road allowance east of section 10-59-4-5.

DIVERSIONS.

Diversion in west of section 5-55-26-4.
 Diversion in east of section 31-54-26-4.
 Diversion in east of section 1/2-57-2-5.
 Diversion in west of section 10-58-2-5.
 Diversion in south of sections 17/18-58-2-5.
 Diversion in east of section 16-58-2-5.
 Diversion in north of section 32-57-2-5.
 Diversion in west of section 25-57-2-5.
 Diversion in east of section 15-58-2-5.
 Diversion in west of sections 1/12-60-3-5.
 Diversion in west of sections 26/35-58-25-4.
 Diversion in north of section 7-57-23-4.
 Diversion in north of section 21-57-23-4.
 Diversion in west of section 17-57-2-5.
 Diversion in west of sections 3/10-57-2-5.
 Diversion in north of section 31-58-4-5.
 Diversion in west of section 1-57-23-4.
 Diversion in sections 15/16-58-22-4.
 Diversions in sections 6/31-58-57-21-4.
 Diversion in sections 14/15/22-58-22-4.
 Diversion in east of section 12-58-22-4.
 Diversion in east of section 29-54-22-4.
 Diversion in south of section 27-54-19-4.
 Diversion in north of section 35-55-19-4.
 Diversion in east of section 15-50-18-4.
 Diversion in east of section 10-50-18-4.
 Diversion in east of section 23-50-20-4.
 Diversion in south of section 15-51-19-4.
 Diversion in north of section 9-51-19-4.
 Diversion in east of section 25-48-20-4.
 Diversions in sections 35/1-48/49-21-4.
 Diversions in south of section 2-49-22-4.
 Diversions in north of section 12-51-19-4.

MISCELLANEOUS.

Retracement of surveyed road north of Big Lake through river lots 22-11, 12, A, B, 1K, 1J, and C-I, St. Albert Settlement.
 Change in survey in west of section 13-57-24-4.
 Change in survey in west of sections 13/24-54-23-4.
 Check of survey across north of section 25-51-21-4.
 Change in survey in sections 17/18-58-3-5.
 Change in survey in east of section 13-51-19-4.
 Re-survey of road across section 29-55-23-4.
 Staked drain south of section 4-51-19-4 to drain sloughs along the road allowance.

CALGARY, December 30th, 1912.

L. C. CHARLESWORTH, Esq.

Director of Surveys,

Edmonton, Alta.

SIR,—I have the honour to submit the following report respecting the work done by myself and party in the Calgary District during the season of 1912.

I received the appointment as District Surveyor and Engineer in February. On March 1st I went to the head office in Edmonton, where I remained about 10 days, when I returned to Calgary. I spent March and part of April in the office compiling plans, etc., for the season's works. Before forming my party I made several trips of examination in company with Mr. Calder and also with Mr. Smith, of the C. P. R., making examinations in the irrigation belt. About the 1st of May I left with my party for the district northwest of Calgary. I worked westerly from Airdrie, clearing up all surveys necessary to Cochrane, then north and easterly through Crossfield. I worked on easterly to Irricana and northeasterly to Carbon, then southerly through Nightingale to Namaka and the Strathmore district, westerly to Sheppard through Calgary and south as far as the Nanton district, taking in all the foothill country west of the railway. When I had completed the work in this territory I moved north of Calgary, westerly and south of Cochrane into the foothill country. Owing to the nature of the country and the deep frost I thought it advisable to disband my party the second week in December. Attached is a list of surveys and examinations.

Your obedient servant,

W. H. YOUNG,

Dist. Surveyor and Engineer.

NEW ROADS.

- Survey of new road up Knee Hill Creek, sections 15/16/17-29-23-4.
- Survey of new road, section 18-16-29-4, and section 13-16-30-4, sections 13/26-16-1-5.
- Survey of new road in section 9-22-2-5.
- Survey new road in section 30/31-23-27-4 to take the place of old Black-foot Trail.
- Survey of new road along blind line north of sections 25, 26, 27, 28 and 29, township 17-25-4, into Ensign.
- Survey of new road through centre of section 10-28-4-5, to replace two old trails.
- Survey of blind line between sections 28/33-27-26-4.
- Survey of new road through centre of section 6-23-28-4.
- Re-survey of old trail in sections 2/11-26-4-5, into town of Cochrane.
- Survey of new road into Crossfield, section 26-28-1-5.
- Survey of blind line north of sections 25/26-28-28-4.

SURVEYS CHANGED.

- Change in survey in sections 7/12, township 26-2/3-5, to survey in section 12-26-3-5.
- Change of survey in section 13-26-3-5 to survey in section 18-26-2-5.
- Change in survey in section 19, to take in improvements.
- Change in surveyed road through section 2-20-3-5.
- Change in survey in section 2-21-4-5.
- Change in survey in section 34-25-2-5.
- Change in surveyed road in section 8-15-29-4.
- Change in survey of Macleod-Calgary trail in township 21-1-5.
- Change in survey of diversion S.E. section 26-28-3-5.

SURVEYS CHECKED.

Check of survey of diversion sections 4/9-25-25-4.

LEVELS TAKEN.

Levels for profile of road allowance each side of C.P.R., between sections 7/12, township 24-25/26-4.

Levels taken for new bridge site in section 28-20-29-4.

Levels measurements taken at new bridge over Sheep Creek at Okotoks, in section 29-20-29-4.

Levels taken for drainage of slough on road allowance at S.W. corner of section 19, 20, 20 and 30, township 27-4-5.

Levels taken for drainage of slough in sections 31/32-20-26-4.

Levels taken of slough south of Crossfield for drain, section 26-28-1-5.

Levels and establishing of corners Telephone Exchange building, lots 33/34, block 43, Calgary.

DIVERSIONS.

Diversion to bridge, section 13-26-1-5.

Diversion in sections 9/17-29-24-4, connecting with old surveyed trail.

Diversion in sections 20/29-29-24-4, to avoid cut banks.

Diversion in N.E. of section 24-29-24-4, to avoid coulee.

Diversion to bridge in section 22-27-23-4.

Diversion to avoid coulee in section 27-27-23-4.

Diversion to avoid steep hill, section 9-22-1-5.

S.W. quarter of section 6, diversion to bridge, township 16-28-4.

Diversion in sections 25/36/30/31-25-2/3-5.

Diversion in section 12-26-3-5.

Diversion in section 25-26-3-5.

West of section 32-25-3-5 and east side of section 6-26-3-5.

Diversion in section 10-27-4-5.

Diversion between sections 33/34-27-4-5.

Diversion in sections 27/28-27-4-5.

Diversion to bridge in S.W. 10-29-23-4.

Diversion in S. W. section 33-28-4-5.

Diversion in N.W. quarter of section 25-28-1-5.

Diversion in sections 32/33-27-2-5.

Diversion to bridge over Rosebud, section 33-23-22-4.

Diversion in sections 27/28-23-22-4.

Diversion in N.E. 22-24-22-4.

Diversion in sections 34/35/36-24-22-4.

Diversion to bridge over Rosebud, sections 26/23-27-26-4.

Diversion to avoid crossing Rosebud in sections 26/35-27-26-4.

Diversion to avoid coulee, section 17-27-26-4.

Diversion to avoid coulee, section 13-28-28-4.

Diversion S.E. 13-27-3-5.

Diversion in sections 29/33-27-2-5.

Diversion in S.E. section 25-16-24-4.

Diversion in sections 9/16-19-1-5.

Diversion in S.E. section 12-27-4-5.

Diversion west of section 11-26-3-5.

Diversion west of section 23-26-3-5.

Diversion to bridge N.E. section 10-25-5-5.

Diversion to avoid Steel Hill, south half of section 14-25-5-5.

Diversion around lake N.E. of section 24-18-28-4 and 19-18-27-4.

Diversion north of section 34-22-23-4 (to be changed by C.P.R.).

Diversion between sections 24/25 and S.W. of 25-16-23-4.

Diversion between sections 23/24-18-25-4.

Diversion to take in improvements, sections 29/33-20-28-4.

Diversion in N.W. quarter of section 25-28-1-5.

Diversion in sections 10/15-27-1-5.

EXAMINATIONS.

Examination of all diversions proposed around Lake Newall, in township 16-17-18, ranges 14/15, west of 4th.

Examination of change in former survey and of new survey, sections 28/33-23-25-4.

Examination re change in former survey in section 7-23-25-4.

Examination of proposed diversion of C.P.R. in S.W. quarter of section 25-26-25-4.

Examination re road up Nanton Creek, in sections 25/18-15-29-4.

Examination of road in sections 20/29-27-24-4. Found location should have been township 27-27-4.

Examination of diversion by C.P.R. over canal, in section 26-23-24-4.

Examination of proposed diversion by C.P.R. in section 24-26-24-4.

Examination of proposed diversion by C.P.R. in sections 15/22-26-24-4.

Examination of diversion proposed by C.P.R., N.E. of section 33 and S.E. of section 4-25/26-24-4.

Examination of diversion by C.P.R. in section 11-26-24-4.

Examination of diversion by C.P.R. in sections 26/35-26-24-4.

Examination of new road required up Braggs Creek, in section 15-22-26/36-23-1-5.

Examination of new road through west side of Sarcee Reserve, townships 22/23-4-5 and township 23-5-5.

Examination of new road into Morley, through Stoney Indian Reserve, in township 21-25-5.

Examination re diversion proposed to bridge by C.P.R., between sections 27/28-25-27-4.

Examination of diversion requested in section 3-27-5-5.

Examination of north boundary of sections 20/22-23-23-4.

Examination of surveyed road leading south from north Morley Trail to Glenbow, in sections 28/33-25-3-5, and surrounding country for new trail.

Examination re crossing of McPherson's coulee, in S.W. of township 28-1-5.

Examination and cross section of Sheep Creek, in section 28-20-29-4 (April 16).

Examination of new road and locating iron posts in sections 1/2-26-4-5.

Examination of range line, township 25-2/3-4, set grade stakes and pickets for grader.

Examined location for new road in sections 18-16-29-4, section 13-16-30-4, and sections 13/26-16-1-5.

Examined and chained north boundary of section 25-27-5 to trail re closing of Edmonton Trail through section 25.

Examined old survey south of section 27-20-26-4, re cancellation of same.

Examined road allowance between sections 34/35 re diversion.

Examined and located corners for road foreman on the Morley Trail, in township 25-3-5.

Gave bridge centres at Okotoks.

Examination of diversion to be graded between sections 14/15-19-1-5 (Oct. 3).

Examined diversion in section 9-22-1-5.

Examined road west from Bowness.

Examination re bridge built 66 ft. east of N.W. 21-25-24-4 (C.P.R.).

Examination re opening of road allowance between sections 13/14-24-25-4.

Examination of road allowance north of sections 19/20/21-28-3-5.

Examination of road allowance north of sections 32/33-28-3-5.

Examination of road allowance between ranges 1/2, township 22, W. of 5th.

MEDICINE HAT, December 30th, 1912.

JOHN STOCKS, ESQ.,

Deputy Minister of Public Works.

Edmonton, Alta.

SIR,—I have the honour to submit the following report with regard to the work performed by me during the past season, in the Public Works District of Medicine Hat and Olds.

The greater part of the work consisted of surveys of road diversions, new roads, examinations and reports.

Below is given a list of surveys and examinations, made in the order of instructions received.

ROAD DIVERSION SURVEYS.

- Diversion from road allowance in township 11, range 5, west of 4th.
- Diversion from road allowance, S.W. quarter, section 25 and N.W. quarter, section 24-29-19-4.
- Diversion from road allowance, section 32-29-19-4.
- Diversion from road allowance, sections 27/28/21/22-29-19-4.
- Diversion from road allowance, section 27-29-19-4.
- Diversion from road allowance, section 16-29-19-4.
- Diversion from road allowance, sections 15/16/20/21-30-17-4.
- Diversion from road allowance, N.E. quarter section 32, N.W. quarter 33, 29-17-4.
- Diversion from road allowance, S.E. quarter section 4-31-17-4, and N.E. quarter 32-30-17-4.
- Diversion from road allowance, S.E. quarter section 4-31-18-4.
- Diversion from road allowance, sections 10/15-29-17-4.
- Diversion from road allowance, S.W. quarter section 4 and S.E. quarter section 5-30-20-4.
- Diversion from road allowance, N.E. quarter section 12-30-20-4, and N.W. quarter section 7-30-19-4.
- Diversion from road allowance, sections 9/16-30-19-4.
- Diversion from road allowance, sections 24/25-30-20-4.
- Diversion from road allowance, sections 26/25-30-20-4.
- Diversion from road allowance, N.W. quarter section 36-30-20-4.
- Diversion from road allowance, S.W. section 29 and N.W. quarter section 20-30-19-4.
- Diversion from road allowance, N.E. quarter section 19-30-20-4.
- Diversion from road allowance, sections 32/33-30-19-4.
- Diversion from road allowance, N.E. quarter section 11 and N.W. quarter section 12-30-19-4.
- Diversion from road allowance, N.W. quarter section 24-30-19-4.
- Diversion from road allowance, S.W. quarter section 6-31-18-4 and S.E. quarter section 1-31-19-4.
- Diversion from road allowance, S.W. quarter section 2-30-19-4.
- Diversion from road allowance, sections 3/4-30-19-4.
- Diversion from road allowance, N. half section 29 and N.E. quarter section 30-29-20-4.
- Diversion from road allowance, sections 10/15, 8/9, 15/16, 30-23-4.
- Diversion from road allowance, N. half section 21-30-22-4.
- Diversion from road allowance, S.E. quarter section 1-30-25-4 and S.W. quarter section 6-30-24-4.
- Diversion from road allowance, S.E. quarter section 14-31-24-4.
- Diversion from road allowance, N.W. quarter section 12-31-24-4.
- Diversion from road allowance, section 1-31-24-4 and N.W. quarter section 6-31-23-4, and S.E. quarter section 12-31-24-4, and S.W. quarter section 7-31-23-4.
- Diversion from road allowance, S.W. quarter section 1, and S.E. quarter section 2-29-28-4.
- Diversion from road allowance, re-survey in sections 10/15-11 3 4.

NEW ROADS, 1912.

- Survey of new roads along C.P.R. section 36-11-1-4.
- Survey of new roads in section 2-29-20-4, section 35-28-20-4.
- Survey of new roads, sections 11/13, 14/15, 22/23, 29-20-4.
- Survey of new roads, sections 6/7, 8/9, 10/11, 29-20-4.
- Survey of new roads, section 7 and sections 5/8, 29-19-4.
- Survey of new roads along bline line north of section 18-29-19-4.
- Survey of new roads along blind line north of section 28-29-19-4.
- Survey of new roads along blind line south of sections 22/15-29-19-4.
- Survey of new roads in sections 5/6/7-30-17-4.

- Survey of new roads along blind line north of section 29-29-20-4.
- Survey of new roads leading to ferry on Red Deer river in sections 26/27, 34/35, 29-21-4.
- Survey of new roads through N.W. 1-4 section 9, 30-24-4.

EXAMINATIONS—REPORTS.

- Examination report on proposed road on sections 20/19-30-18-4.
- Examination report on proposed road in sections 26/27-28-19-4.
- Examination report on proposed road in sections 14 to 27-28-19-4.
- Examination report on proposed road in sections 7/8-30-20-4.
- Examination report on proposed road in N.W. quarter section 13-30-20-4.
- Examination report on proposed road south of section 3-30-20-4.
- Examination report on road allowance south and east section 18-30-19-4.
- Examination report on proposed road section 9-30-19-4.
- Examination report on proposed road section 7-19-19-4.
- Examination report on road allowance west section 19-30-19-4.
- Examination report on proposed road from Morrin west to Red Deer River.
- Examination report on road allowance east of sections 1/12-30-21-4.
- Examination report on road conditions N.E. quarter section 6-30-20-4.
- Examination report on proposed diversion S.W. quarter section 6-31-20-4.
- Examination report on road allowance west of section 18-30-20-4.
- Examination report of road diversion asked for in S.W. quarter section 1-30-19-4.
- Examination report of road conditions in sections 21/28-29-20-4.
- Examination report of road conditions in section 19-29-20-4.
- Examination report of road diversion asked for between sections 25/36-29-21-4.
- Examination report of proposed road in sections 18/19, 17/20-31-21-4.
- Examination report of road asked for through W. half section 24-29-20-4.
- Examination report of road allowance between sections 15/16-29-17-4.
- Examination report of road crossings along the Suffield-Kipp branch C. P. Railway.

The season in general has been a favourable one for performing surveys.

The first part of the year was spent in making surveys in the Medicine Hat district.

The party and outfit were then shipped to Acme, and work was continued throughout the season in the Olds district. A number of surveys were made which had been outstanding for several years.

Cross-sections were taken for bridge sites and for improving the grades of hills. An endeavour was made to run as easy grades as possible, and with as little damage as possible to private property.

Reports in detail were forwarded to the department at the time of examination and survey.

Party was disbanded on November 2nd last, and the balance of the year spent in making plans, etc.

Your obedient servant,

J. A. CARBUT,

District Surveyor and Engineer.

Office of the District Surveyor and Engineer,

LACOMBE, ALTA., December 31st 1912.

L. C. CHARLESWORTH, ESQ.

Director of Surveys,

Edmonton, Alta.

SIR,—I have the honour to submit the following report in connection with the work performed by myself and party, in the Lacombe Public Works District during the season of 1912.

On April the 15th I organized my party and took the field. Only one of the men who had been with me for several seasons joined the party, and at the beginning I might say that I had difficulty in getting men that were suited to the work, later on in the season, however, I was able to improve in several places and work went along much better.

At the start I pulled my outfit toward Wetaskiwin and after completing a number of small surveys in that vicinity I received instructions for urgent surveys at Alix and I therefore pulled in that direction. After completing surveys in this neighbourhood I moved north of Stettler, thence to Delburne. There were more small surveys in this particular portion than any other part of my district and these took some time to complete. Instructions were issued for the survey of the Old Rocky Mountain House Trail and from Delburne I moved toward the west to give this attention, making a few surveys on the way. This old trail runs from the Raven, in section 14-36-4-5 to the Mountain House, in section 22-39-7-5, and being probably 40 miles long, took about two months to complete. On completion of this trail I surveyed a number of small diversions west of Ponoka and as I received instructions to immediately survey trunk roads between Stettler, Big Valley and Scolard and between Big Valley and Gopher Head, I left for the east. This was toward the end of October, and as the ground was beginning to freeze up and many mounds to be dug, these two roads occupied our time practically the balance of the season. As soon as I had finished here I moved and surveyed roads at Edberg, Duhamel and Alix, and then pulled my outfit to headquarters and disbanded just before Christmas.

Right from the beginning of the season to the end of September was incessant rains and the trails at times were almost impassable, and I found it necessary to put on a third team in order to make any progress. The balance of the season was exceptionally good and we were able to camp out later than usual.

This year I had hoped to be able to complete all surveys on the schedule and would have done so had it not been for the long trail surveys under files 16173, 20490 and 19377, consequently a good many small surveys had to be left over.

The greater part of the season has been very unfavourable for field work and I feel that I have accomplished less than in any other year.

Attached hereto is a schedule showing the work done and classified as: New Roads, Road Diversions, Examinations, Checks and Mounds Dug.

Your obedient servant,

A. S. STEWART,

District Surveyor and Engineer.

NEW ROADS.

New road along blind line between sections 30/31-42-27-4.
 New road in section 23-41-21-4, change.
 New road in N.E. 31 and N.W. 32-39-22-4, change.
 New road old Rocky Mountain House Trail from Raven to the Mountain House across townships 36/37/38/39, ranges 4/5/6/7, W. 5th M.
 New road across section 32-37-6-5, section 6-33-6-5, and sections 1/2/11-38-7-5.
 New road from Big Valley to Gopher Head across townships 34/35, ranges 18/19/20, W. 4th M.
 New road along quarter line in section 19-44-26-4.
 New road into Duhamel in sections 27/34-45-21-4.
 New road through the centre of section 6-46-20-4.
 New road from Stettler to Big Valley and Scollard in townships 34/35/36/38, ranges 19/20, W. 4th M.

ROAD DIVERSIONS.

Diversion in S.W. 3-38-26-4: private road.
 Diversion in section 27-37-23-4, around east end of Stinking Lake.
 Diversion in N. half section 31-39-23-4 and S.W. 6-40-23-4.
 Diversion in N.W. 32-38-23-4.
 Diversion in S.W. 4-41-24-4.
 Diversion in N.E. 1-48-24-4; change.
 Diversion in sections 7/16/17-44-19-4.
 Diversion in E. half section 9-39-24-4.
 Diversion in N. half section 34-37-4-5 and S.W. 3-38-4-5.
 Diversion in S.E. 4-37-26-4.
 Diversion in sections 11/14/15-39-21-4.
 Diversion in N.W. 9-38-23-4.
 Diversion in E. half section 22 and N.W. 23-37-23-4.
 Diversion in W. half section 17-41-22-4.
 Diversion in S.W. 35 and N.W. 26-39-23-4.
 Diversion in N.E. 34-43-27-4 and S. half section 3-44-27-4.
 Diversion in N.E. 14 and W. half section 13-38-24-4.
 Diversion in S.W. 14, S.E. 15 and N.E. 10-39-24-4.
 Diversion on S. boundary section 29-41-22-4.
 Diversion north of sections 7/8-46-22-4.
 Diversion in S.W. 28 and N.E. 21-37-24-4.
 Diversion on E. boundary sections 4/16-37-23-4.
 Diversion in N.E. 33 and N.W. 34-44-22-4.
 Diversion in N.W. 34-37-3-5.
 Diversion in S.E. 16-38-26-4.
 Diversion in N.W. 6-37-22-4.
 Diversion in N.W. 8, S.E. 18, N.W. 17 and S.W. 20-45-23-4.
 Diversion in S.W. 12-39-22-4, into Nevis.
 Diversion in N.W. 20 and N.E. 19-39-4-5.
 Diversion in N.W. 19-41-18-4.
 Diversion east of sections 12/13/24-40-20-4.
 Diversion in S.W. 18 and S.E. 13-39-19/20-4.
 Diversion in S.E. 2 and S.W. 1-40-24-4.
 Diversion in N.E. 26 and Drain in N.W. 25-42-23-4.
 Diversion in N.E. 20-37-23-4.
 Diversion in S.E. 31-38-27-4.
 Diversion in N.W. 3-38-23-4.
 Diversion between sections 10/11-42-28-4.
 Diversion in sections 3/4-40-23-4, and Section 33-39-23-4.
 Diversion in S. half sections 26/27-40-23-4.
 Diversion in W. half section 1-41-23-4.

EXAMINATIONS.

Examination of gravel pit in S.W. 4-43-24-4.
 Examination in section 14-38-28-4.
 Examination north of sections 9/10/11-38-23-4.
 Examination of road allowance east of sections 3/10/15/22/27-38-4-5, and north of sections 35/36-37-4-5.

Examination east of section 10-38-28-4.
 Examination of C. & E. Trail between Lacombe and Red Deer.
 Examination in S.E. 19-44-25-4.
 Examination in N.E. 12-44-26-4.
 Examination in S.E. 25-44-22-4.
 Examination between sections 3/10-42-26-4.
 Examination in S.W. 4-40-19-4.
 Examination in S.W. 6-44-22-4.
 Examination at the S.E. corner section 3-39-2-5.
 Examination between sections 4/5-40-27-4.
 Examination and survey of school grounds in N.W. 3-37-2-5.
 Examination in N.E. 9-39-23-4.
 Examination in S.W. 18-37-23-4.
 Examination in section 6-41-19-4.
 Examination in sections 27/28/29-41-27-4.
 Examination in E. half section 9-39-24-4.
 Examination of blind line between sections 13/24-37-23-4.
 Examination at the east side section 14-43-24-4.
 Examination east of section 17-39-21-4.
 Examination for subway in N.E. 36-41-21-4.
 Examination in N.E. 6-38-24-4.
 Examination east of section 36-40-18-4.
 Examination between sections 33/34 and 27/28-40-2-5.
 Examination between sections 17/18-39-27-4.
 Examination north of section 24-37-24-4.
 Examination between sections 9/10-44-22-4.
 Examination in sections 3/9/16-40-5-5.
 Examination between sections 3/4-47-23-4.
 Examination in centre of section 16-35-6-4.
 Examination in sections 8/17-42-18-4.
 Examination of blind line between sections 2/11 and 1/12-40-27-4.
 Examination in sections 2/11-41-28-4.
 Examination of blind line between sections 28/33-38-23-4.
 Examination in sections 16/21-40-6-4.
 Examination in S.W. 3-41-11-4.
 Examination between sections 22/23-44-11-4.
 Examination between sections 22/23-39-22-4.
 Examination between sections 21/28-37-28-4.
 Examination in N.E. 26-42-23-4.
 Examination on north boundary sections 5/6-43-27-4, and north boundary section 36-42-28-4.
 Examination in sections 27/34-45-21-4.
 Examination on north boundary section 35-38-19-4.
 Examination in centre section 6-46-20-4.
 Examination of road from Stettler to Big Valley and Schollard through townships 34/35/36/38, ranges 19/20, W. 4.

CHECKS.

Check in section 9-43-25-4.
 Check in W. half section 6-41-19-4.
 Check in section 30-46-2-5.
 Check in S.W. 14 and N.W. 11-39-23-4.
 Check in E. half section 1-46-2-5.
 Check in N.W. 29-41-21-4.
 Check across sections 26/27-42-1-5.
 Check and re-survey at the N.E. corner section 11-43-24-4.
 Check of east boundary section 28-41-28-4.
 Check between sections 23/14-40-19-4.
 Check in section 36-40-27-4.

MOUNDS DUG.

Dug pits in S. half section 3-38-26-4.
 Dug pits in sections 9/16-38-2-5.
 Dug pits in S. half section 26-40-2-5.
 Dug pits in N. half section 23-40-24-4.
 Dug pits in W. half section 27-41-27-4.
 Dug pits in S.E. 9-40-1-5.

Dug pits in S. half section 13-40-1-5.
 Dug pits in S.W. 27-41-28-4.
 Dug pits in between sections 7/8-37-23-4.
 Dug pits in W. half section 21-37-24-4.
 Dug pits in N.E. 20-37-23-4.
 Dug pits in section 31-41-21-4.
 Dug pits in section 36-40-27-4.
 Dug pits in S.E. 2-41-25-4.
 Dug pits east of sections 23/26-40-23-4.

EDMONTON, December 30th, 1912.

JOHN STOCKS, ESQ.,

Deputy Minister of Public Works.

Edmonton, Alta.

SIR,—I beg to submit the following report of surveys made in the district of North Alberta during the past season.

I organized my party on the 20th of April and started work in the vicinity of Athabasca Landing on the 24th of the same month. After completing the surveys necessary in that vicinity, I surveyed the road to Lac la Biche via Plomondonville, which I finished the latter part of the month of August. I then surveyed the road from Lac la Biche to Whitefish Indian Reserve, generally known as the Saddle Lake road to Lac la Biche. The remainder of the season I spent in making outstanding surveys in the north of Vegreville District until the ground was frozen too deep for convenience in mounding. I then moved my outfit to Edmonton, arriving at that place November the 14th.

Attached you will find a list of surveys made.

Your obedient servant,

A. P. C. BELYEA,

District Surveyor and Engineer.

DIVERSIONS.

Diversion in S.W. quarter section 26-65-22-4.
 Diversion in S.W. quarter section 35-65-22-4.
 Diversion in N.E. quarter section 8-65-21-4.
 Diversion in N.E. quarter section 10-65-22-4.
 Diversion in N.E. quarter section 34-64-21-4.
 Diversion in E. half section 5-65-21-4.
 Diversion in S.W. quarter section 6-67-23-4.
 Diversion in S.E. quarter section 25 and S.E. quarter section 26-66-24-4.
 Diversion in sections 7/18-67-21-4.
 Diversion in N.W. quarter section 22-65-21-4.
 Diversion in section 2-68-16-4.
 Diversion in section 1/2-68-16-4.
 Diversion in section 6-68-15-4.
 Diversion in section 33-67-15-4.
 Diversion in sections 20/28/29/32-60-11-4.
 Diversion in sections 4/5-61-11-4.
 Diversion in sections 10/11/14-58-8-4.
 Diversion in sections 26/34-56-5-4.
 Diversion in E. quarter section 8-56-5-4.
 Diversion in section 35-56-5-4 and section 2-57-5-4.
 Diversion in sections 1/11/12-57-5-4.

Diversion in Towersite at Brosseau Ferry.
 Diversion in S.W. quarter section 13-54-11-4.
 Diversion in N.W. quarter section 13-54-23-4.

BLIND LINES.

North sections 15/16-65-21-4.
 Centre section line through section 19-60-11-4.

NEW ROADS.

New road, Athabasca Landing to Plomondonville.
 New road, section 6-65-20-4.
 New road, sections 1/2-65-21-4.
 New road, Athabasca Landing north to section 22-67-22-4.
 New road through section 19-66-22-4.
 New road through sections 3/9/10-68-16-4.
 New road Lac La Biche to Whitefish Indian Reserve.
 New road, north section 14 and division sections 14/23/24-58-8-4.
 New road, sections 34/26-59-11-4.
 New road, sections 26/27/34-56-5-4.
 New road across township 54-11-4.
 New road across section 28-57-15-4.
 New road, sections 4/5/6-59-4-4.

LETHBRIDGE, December 31st, 1912.

JOHN STOCKS, ESQ.,

Deputy Minister of Public Works,
 Edmonton, Alta.

SIR,—I have the honour to submit the following report of the work done in the district of South Alberta during the year 1912.

The winter season was occupied to a great extent with office work, preparing returns of surveys made during the summer of 1911. Mr. G. W. French, my assistant, arrived on the 15th of March and we immediately commenced field work, doing some odd jobs that were easy of access. My teams came in from Raymond on April 1st for provisions, etc., and returned to section 16-5-20-4, where my party began work on April 5th. We have cleared up all surveys in the vicinity of Raymond, Welling, Magrath, Spring Coulee, Raley, Woolford, Whisky Gap (Township 1-23-4), Taylorville, Kimball, Aetna, Boundary Creek, Cardston, Beazer, Mountain View, Leavitt, Caldwell, Hill Spring, Dry Fork, Twin Butte, Fishburn, Ewelme, Macleod, and returned by way of Lethbridge to Tp. 5-19-4, where my party is now working. We have had considerable storm since June which has kept us back to some extent, but on the whole, the season's work has been quite satisfactory.

Below is a list of surveys and examinations upon which I have already reported.

Respectfully submitted,

Your obedient servant,

R. J. GORDON,

District Surveyor and Engineer.

NEW ROADS.

Road through sections 29/30/31/32-9-27-4.
 Road on blind line south of section 22-5-20-4.
 Preliminary survey for Monarch Bridge.
 Road through Whisky Gap (township 1-23-4).
 Road north of sections 2/11-11-28-4.
 Road through section 10-17-17-4.
 Road through section 11-2-26-4.
 Road through sections 3/10-3-26-4.

SURVEYS CHECKED.

Road on north boundary of section 16-12-23-4.
 Road on north boundary of township 4-30-4.
 Angles on old survey in section 15-2-26-4.

DIVERSIONS.

Diversion into section 34-8-21-4, around jail property.
 Diversion into N.W. quarter section 20 and W. half section 29-5-20-4.
 Diversion into sections 8/9/17-5-20-4.
 Diversion into section 7-6-21-4.
 Diversion into N.E. quarter section 23 and N.W. quarter section 24-5-20-4.
 Diversion into N.W. quarter section 16-6-22-4.
 Diversion into W. half section 27-5-21-4.
 Diversion into N.W. quarter section 10-6-29-4.
 Diversion into N.E. quarter section 20-2-24-4.
 Diversion into N.E. quarter section 2 and E. half section 11-4-22-4.
 Diversion into N.W. quarter section 8 and W. half section 17 and S.E. quarter section 18-5-20-4.
 Diversion into sections 9/10/15/16-7-21-4.
 Diversion into N.W. quarter section 25 and S.W. quarter section 36-4-22-4.
 Diversion into N.W. quarter section 21-3-29-4.
 Diversion into sections 28/29-2-24-4.
 Diversion into sections 3 and 34, townships 2 and 3-24-4.
 Diversion into S.W. quarter section 14-3-24-4.
 Diversion into S.W. quarter section 17-3-24-4.
 Diversion into section 34-4-22-4.
 Diversion into section 35-2-24-4.
 Diversion into N.E. quarter section 36-2-24-4.
 Diversion into N.W. quarter section 33-4-23-4.
 Diversion into sections 1/2-5-22-4.
 Diversion into section 27-2-24-4.
 Diversion into sections 5/6-9-22-4.
 Diversion into sections 22/23/26-1-24-4.
 Diversion into sections 11/12-2-24-4.
 Diversion into sections 6/7-2-23-4.
 Diversion into section 31-1-23-4.
 Diversion into sections 24/25-2-24-4 and 31-2-23-4 and N. half section 19-2-24-4.
 Diversion into section 27-1-24-4.
 Diversion into N.E. quarter section 34, N. half sections 35/36-1-24-4, and section 1 and S.W. quarter section 2-2-24-4.
 Diversion into S.W. quarter section 16-2-23-4.
 Diversion into S.W. quarter section 18-2-23-4.
 Diversion into S.E. quarter section 14-2-24-4.
 Diversion into N.E. quarter section 2 and sections 11/12-2-24-4.
 Diversion into S. half section 6-2-23-4.
 Survey on quarter line in section 31-4-29-4.
 Diversion into S.E. quarter section 8-2-25-4.
 Diversion into N.E. quarter section 34-6-2-5.
 Diversion into N.W. quarter section 32-13-23-4. and S.W. quarter section 5-14-23-4.
 Diversion into N.W. quarter section 24-1-24-4.
 Diversion into S.W. quarter section 20-1-24-4.
 Diversion into S.W. quarter section 16-2-24-4.
 Diversion into S.W. quarter section 14-1-24-4.

Diversion into S.E. quarter section 13-1-25-4.
 Diversion into N.W. quarter section 31-1-24-4.
 Diversion into S.W. quarter section 17-2-27-4.
 Diversion into S.E. quarter section 28-2-27-4.
 Diversion into S. W. quarter section 7-2-27-4.
 Diversion into E. half section 21-2-27-4.
 Diversion into N.E. quarter section 9-2-26-4.
 Diversion into S.E. quarter section 15-8-26-4.
 Diversion into section 29-4-27-4.
 Diversion into N.E. quarter section 31-4-29-4.
 Diversion into S.E. quarter section 21 and N. half section 22-8-25-4.
 Diversion into N.W. quarter section 5 and S.W. quarter section 8-8-25-4.
 Diversion into N.W. quarter section 22-5-28-4.
 Diversion into S.W. quarter section 2-6-27-4.
 Diversion into S.E. quarter section 3-8-26-4.
 Diversion into S.W. quarter section 7-7-26-4.

CHANGES.

Changed survey in sections 4/9-8-29-4.
 Changed survey in section 6-11-19-4.
 Changed survey in section 15-2-26-4.
 Changed survey in section 16-2-26-4.
 Changed survey in N.E. quarter section 11-3-26-4.
 Changed survey in section 8-8-25-4.
 Changed survey in N.W. quarter section 10-5-22-4.
 Changed survey in sections 14/23-5-30-4.

EXAMINATIONS.

Examination of road allowance east of S.E. quarter section 9-6-2-5.
 Examination for road through section 29-9-27-4.
 Examination for proposed change in road through S.W. quarter section 10-6-2-5.
 Examination of bridge between sections 10/15-6-30-4.
 Examination of crossing Kootenay & Alberta Ry. N.E. quarter section 12-6-2-5.
 Examination for change in Pincher Creek-Macleod Trail section 3-7-29-4.
 Examination of overhead bridge in S.W. quarter section 1-10-23-4.
 Examination for road through sections 14/23/26/25-11-29-4, and sections 30/31-11-28-4.
 Examination for road through sections 2/3/9/10-11-29-4.
 Examination of road allowance between sections 8/9-9-22-4.
 Examination to open road through N.W. quarter section 28-2-14-4.
 Examination with view to opening road in sections 16/17/18-2-14-4.
 Examination for opening diversions in sections 2/11-4-22-4.
 Examination for opening diversions in sections 20/26-4-22-4.
 Examination and grades staked into section 30-10-21-4.
 Examination for change in sections 1/2/10-9-1-5.
 Examination for change in section 30-9-29-4.
 Examination for change in N.W. quarter section 5-9-1-5.
 Examination for change in S.W. quarter section 3-7-1-5.
 Examination of bridge site between sections 28/29-9-2-5.
 Examination for diversion between sections 3/4/9/10-9-2-5.
 Examination for road through section 34-9-2-5.
 Examination for diversion and bridge between sections 22/23-9-2-5.
 Examination for diversion into S.E. quarter section 1-9-2-5.
 Examination for diversion into section 32-4-21-4.
 Examination for road to sections 1/2/11-8-22-4.
 Examination of new grade to Old Man River at Brocket.
 Examination of roads East of Coaldale in township 9-19-4.
 Examination of proposed road through S. half section 21-8-22-4.
 Examination of proposed road in section 31-12-19-4.
 Examination of road re proposed change in sections 31/36, township 2-25/26-4.
 Examination of Macleod-Fishburn Trail through townships 6/7-26-4.
 Examination of blind line north of section 26-4-29-4.
 Examination of blind line south of section 33-7-26-4.
 Examination for change in S. half section 29-7-29-4.

Examination of road allowance west of S.W. quarter section 2-6-27-4.
 Examination for change in section 8-8-25-4.
 Examination for diversion S.E. quarter section 19-1-23-4.
 Examination of surveyed road through section 3-2-27-4.
 Examination of proposed road through section 2-1-26-4.
 Examination for proposed change in section 9-3-29-4.
 Examination for proposed diversion in N.E. quarter section 16-8-29-4.
 Examination for change in sections 13/14/15-6-1-5.
 Examination for new road in sections 28/29/30/32/33-13-28-4, and sections 25/26-13-29-4.
 Examination for diversion into section 19-3-21-4.
 Examination for bridge sites in section 7-3-21-4.
 Examination for new survey into section 13-1-25-4.
 Examination for diversion into N.W. quarter section 31-1-24-4.
 Examination and cross-section of Waterton River W. half section 31-5-26-4.
 Examination and staked new grades to bridge in sections 7/18-10-16-4.
 Examination re change in N.W. quarter section 23-4-30-4.
 Examination re change in section 17-8-25-4.
 Examination re diversion in section 19-4-29-4.
 Examination of streets in Wilmor Townsite, section 16-6-3-5.
 Examination for road diversion north of sections 10/11-4-30-4.
 Examination of road asked for in sections 25/36-7-3-5.
 Examination of C.P.R. crossing west of section 18-7-2-5.
 Examination for road diversion between sections 14/15-4-30-4.
 Examination for road diversion between sections 16/17-14-22-4.
 Examination for road diversion between sections 14/15-11-28-4.
 Examination for new road through section 21-2-16-4.
 Examination and staked grades to bridge site, section 5-15-25-4.
 Examination of earth piled on road in section 11-9-26-4.
 Examination re proposed road south of section 23-1-24-4.
 Examination for change in S.W. quarter section 4-2-27-4.
 Examination of Township Line north of township 2-26-4 (Cardston to Leavitt).
 Examination re proposed diversion in section 23-7-25-4.
 Examination re closing old trail in S.E. quarter section 21-7-26-4.
 Examination for change in E. half section 35-6-26-4.
 Examination for change in sections 20/21-8-25-4.

VEGREVILLE, December 31st, 1912.

JOHN STOCKS, ESQ.,

Deputy Minister of Public Works,

Edmonton, Alta.

SIR,—I have the honour to submit the following report of the surveys made and other work done in the Public Works District of Vegreville and Wainwright during the past season.

The first part of the year was spent in preparing and completing the returns and plans of the previous season's work.

On April 22nd I organized my party at Vegreville and started work in the Warwick and Hairy Hill districts. I then worked easterly through the Russian settlement to Landonville. From here I moved into near Mannville and Vermilion, about which places considerable work was done, after which I worked easterly along the Canadian Northern Railway as far as Kitscoty and south from there into the McDonaldville and Oxville settlements.

I then worked westerly along the north side of the Battle River to Auburndale, and cleared up all the work that had collected in this

locality. From here I moved south across the Battle River, into the Wainwright district and thence southwesterly across country to Castor, clearing up all the work that was in reach.

From Castor I worked westerly along the railway to Botha, thence north along the Calgary Branch of the Canadian Northern Railway to Donalda and Ferry Point, about which places considerable work was done. Finishing here I moved east to Hardisty and cleared up a lot of new work which had accumulated here.

I then moved to Irma and leaving my assistant to do the work here, I with a party of men, went to Edgerton, and did the work that was required there, also a number of jobs about Ribstone and Heath, after which I joined my party and moved into the Saulteux and Birch Lake localities, and after completing work here I moved westerly along the Canadian Northern Railway, as far as Chipman, clearing up any work that was required, after which I moved my outfit to Vegreville and paid off my men on November 29th. This completed the season's work.

During the season I was able to spend considerable time with the different road foremen on various jobs and especially where new work was required, I tried to go over it with them, which act I was able to carry out only by the use of the automobile, which I found was a great advantage.

Throughout the Vegreville and Vermilion districts I find a substantial system of improvements being carried out. Further south, however, in the Castor country, a lot of improving remains still to be done, and as it was very wet in this locality during the past year, some of the roads were almost impassable. These should be improved, as there is a large settlement which has to use them.

The work of the past season consists in the survey of new roads, road diversions, ditches, examination of roads, reports and estimates.

The following is a list of the work done:

NEW ROADS.

New road north of section 3-56-14-4.
 New road north of sections 15/16-53-12-4.
 New road through section 18-55-13-4.
 New road through section 12-52-11-4.
 New road across sections 30/31-49-6-4.
 New road north of section 1-51-8-4.
 New road through section 34-51-4-4.
 New road north of sections 25 to 28-48-2-4, and north of section 30-48-1-4.
 New road north of sections 27/28-37-15-4.
 New road north of section 14-43-18-4.
 New road through section 22-43-18-4.
 New road through sections 1-2-3/4-43-10-4.
 New road through section 27-45-9-4.
 New road through section 36-44-10-4.
 New road through sections 1/12-44-4-4. (Pits to dig.)
 New road north of sections 1-2-3-4/5-48-8-4.
 New road through section 19-53-16-4.
 New road north of sections 13 to 18-52-16-4 and north of sections 13-14/15-52-17-4.

ROAD DIVERSIONS.

Diversion east of section 9-53-14-4.
 Diversion north of section 20-53-13-4.

Diversion west of section 16-54-14-4.
 Diversion east of section 17-54-14-4.
 Diversion into sections 19-20-29/30-54-12-4.
 Diversion west of section 31-53-12-4 and east of section 36-53-13-4.
 Diversion east of section 18 and west of section 17-54-12-4.
 Diversion north of section 31-53-12-4.
 Diversion south of section 21-53-12-4.
 Diversion east of section 22-53-12-4.
 Diversion north of section 10-53-12-4.
 Diversion into sections 8-17/18-53-12-4.
 Diversion east of section 13-53-13-4, and west of section 18-53-12-4.
 Diversion north of section 19-53-12-4.
 Diversion east of section 14-52-12-4.
 Diversion south of section 14-53-12-4.
 Diversion north of section 32-52-12-4.
 Diversion south of section 3-53-12-4, and north of section 34-52-12-4.
 Diversion west of section 30-53-10-6.
 Diversion east of section 13-55-14-4.
 Diversion west of section 7-52-10-4.
 Diversion west of section 22-52-11-4.
 Diversion west of section 16-52-11-4.
 Diversion south of section 15-52-11-4. (Two diversions.)
 Diversion south of section 29-52-11-4.
 Diversion west of section 27-52-11-4. (Two diversions.)
 Diversion south of section 28-52-11-4.
 Diversion west of section 27-52-11-4.
 Diversion west of section 5-53-9-4.
 Diversion west of section 21-53-9-4.
 Diversion east of section 29-53-9-4.
 Diversion into sections 19-29/30-53-9-4.
 Diversion east of section 16-54-9-4.
 Diversion east of section 9-54-9-4.
 Diversion west of section 3-54-9-4.
 Diversion north of section 9-53-9-4.
 Diversion west of section 26-52-10-4.
 Diversion south of section 27 and north of sections 22/23-52-10-4.
 Diversion of section 22-52-10-4.
 Diversion east of section 19-52-9-4.
 Diversion south of section 1-53-9-4.
 Diversion into N.E. quarter of section 32-52-9-4.
 Diversion east of section 34-51-9-4. (No plan to be made, survey cancelled.
 Diversion north of N.W. quarter of section 35-51-9-4.
 Diversion north of N.E. quarter of section 35-51-9-4.
 Diversion north of section 34-51-9-4.
 Diversion south of section 3-52-9-4.
 Diversion south of section 4-52-9-4, and north of section 33-51-9-4.
 Diversion into S.W. quarter of section 27-53-8-4.
 Diversion west of section 11-53-7-4.
 Diversion east of section 21-53-7-4.
 Diversion west of sections 19/30-53-6-4.
 Diversion east of section 21-53-7-4.
 Diversion east of section 4-54-7-4.
 Diversion west of section 15-54-7-4.
 Diversion east of section 21-54-7-4.
 Diversion north of section 33-53-7-4 and east of section 4-54-7-4.
 Diversion between sections 4/5-54-7-4.
 Diversion into S.W. quarter of section 4-54-7-4.
 Diversion west of sections 22/27-54-7-4.
 Diversion into N.W. quarter of section 27-54-7-4.
 Diversion into S.W. quarter of section 2-55-7-4.
 Diversion east of section 16-54-8-4.
 Diversion into S.W. quarter of section 27-54-8-4.
 Diversion west of sections 34/27-54-8-4.
 Diversion west of section 13, and east of sections 14/23-55-8-4.
 Diversion north of section 24-49-7-4.
 Diversion west of section 11-55-8-4.
 Diversion into sections 10-14/15-56-7-4.
 Diversion east of section 15-55-7-4.

Diversion east of section 24-56-7-4 and west of section 19-56-6-4.
 Diversion east of sections 22/27-55-7-4.
 Diversion north of section 12-55-6-4.
 Diversion east of section 3-56-6-4.
 Diversion west of sections 13/24-55-6-4.
 Diversion into N.E. quarter of section 21-50-6-4.
 Diversion north of section 15-50-6-4.
 Diversion west of section 15-50-6-4.
 Diversion west of section 11-50-6-4.
 Diversion north of section 1-50-6-4.
 Diversion west of section 9-50-6-4.
 Diversion into N.E. quarter of section 5-50-6-4.
 Diversion east of sections 12/13-50-7-4.
 Diversion north of section 19-49-6-4.
 Diversion east of sections 24/25-49-7-4 and south of section 30-49-6-4.
 Diversion into S.E. quarter of section 4-50-7-4, and N.E. quarter of section 33-49-7-4.
 Diversion west of sections 3/10-50-7-4.
 Diversion west of section 27-49-7-4.
 Diversion north of section 24-49-7-4.
 Diversion between sections 2/3-55-8-4.
 Diversion north of section 21-49-6-4.
 Diversion across S.E. quarter of section 2-51-5-4.
 Diversion east of sections 1/12-51-8-4 and west of sections 7/6-51-7-4.
 Diversion south of section 12-51-8-4.
 Diversion west of section 18-51-7-4.
 Diversion into N.W. quarter of section 7-50-7-4.
 Diversion into N.E. quarter of section 10-50-7-4.
 Diversion east of sections 12/13-50-9-4, and west of section 18-50-8-4.
 Diversion east of sections 12/13-49-9-4.
 Diversion into section 33-50-5-4.
 Diversion west of sections 16/21-54-4-4.
 Diversion east of section 17-54-4-4.
 Diversion into east half of section 2-49-2-4.
 Diversion west of section 36-48-3-4.
 Diversion east of section 35-48-3-4.
 Diversion north of section 25-48-2-4.
 Diversion north of section 30-48-1-4.
 Diversion into sections 4/9-47-2-4.
 Diversion east of sections 20/17-46-2-4.
 Diversion into N.W. quarter of section 28-46-2-4.
 Diversion into S.E. quarter of section 17-46-2-4.
 Diversion into N.E. quarter of section 17-47-2-4.
 Diversion east of sections 28/33-46-6-4.
 Diversion into sections 28-29/33-46-5-4.
 Diversion into sections 21/22-47-7-4.
 Diversion into sections 13/14-47-7-4.
 Diversion west of section 24-45-9-4.
 Diversion east of section 33-42-11-4.
 Diversion east of section 28-42-11-4.
 Diversion north of section 35-37-15-4.
 Diversion north of section 7-38-15-4.
 Diversion east of section 6-41-18-4.
 Diversion east of section 16-41-18-4.
 Diversion east of section 15-41-18-4.
 Diversion into sections 23/26-41-18-4.
 Diversion west of section 33-41-18-4.
 Diversion east of section 18-41-18-4.
 Diversion into sections 11-12/13-43-18-4.
 Diversion south of section 29-43-18-4.
 Diversion south of section 5-43-10-4.
 Diversion west of section 18-43-9-4.
 Diversion north of section 35-43-4-4. (Pits to dig.)
 Diversion south of section 16-45-11-4.
 Diversion west of section 10-45-11-4.
 Diversion east of sections 11/14-43-4-4. (Pits to dig.)
 Diversion into sections 11-12/14-44-3-4. (Pits to dig.)
 Diversion north of section 11-44-3-4. (Pits to dig.)
 Diversion west of section 17-44-3-4. (Pits to dig.)

Diversion into section 36-44-10-4.
 Diversion east of section 14-44-5-3. (Pits to dig.)
 Diversion west of section 24-44-5-4.
 Diversion south of section 28-45-9-4.
 Diversion west of section 12-45-9-4.
 Diversion into section 1-44-4-4. (Pits to dig.)
 Diversion south of section 12-48-8-4.
 Diversion east of section 28-48-8-4.
 Diversion south of section 13-50-10-4. (Pits to dig.)
 Diversion between sections 24/25-53-13-4.
 Diversion west of section 12-49-11-4.
 Diversion south of section 29-49-11-4.
 Diversion east of section 27-54-12-4.
 Diversion east of sections 24/25-52-12-4.
 Diversion into sections 30/32-50-12-4.
 Diversion south of section 18-51-14-4.
 Diversion into sections 29/30-51-15-4.

EXAMINATIONS.

Examination and report of road north of section 33-56-13-4.
 Examination and report of road north of section 33-55-13-4.
 Examination and report of roads between Minburn and Chailey.
 Examination and report of road north of section 34-51-7-4.
 Examination and report re subway location west of section 19-41-6-4.
 Examination and report of road east of section 11-50-3-4.
 Examination and report diversion west of section 1-51-6-4, should come under private road clause.
 Examination and report of road east of section 8-48-1-4.
 Examination and report on roads from Elk Point to St. Paul De Metis.
 Examination and report of road north of section 24-51-4-4.
 Examination and report of road west of section 35-47-1-4.
 Examination and report of roads from Mannville to Saskatchewan River.
 Examination and report of road north of section 24-51-15-4.
 Examination and report of road north of section 31-55-13-3.
 Examination and report of blind line north of sections 1 to 6-48-8-4, and township line south of section 48-8-4.
 Examination and report of road east of section 10-45-7-4.
 Examination and report of road east of section 8-38-15-4.
 Examination and report of road north of section 19-41-18-4.
 Examination and report of road west of sections 25/36-42-4-4. Survey needed.
 Examination and report of road east of sections 24/25-44-5-4.
 Examination and report of road north of section 20-53-16-4.
 Examination and report of roads to Desjarlais Ferry.
 Examination and report of roads south from Mundare.
 Examination of road to Lea Park Ferry, staked hill grade in section 11-54-3-4.
 Staked hill grade north of Vermilion.

RESURVEYS.

Resurvey of road east of section 32-51-4-4.

DRAINS.

Staked drain across section 9-44-17-4. (For Mr. Trimble.)
 Staked drain across section 15-54-18-4. (For Mr. Trimble.)
 Staked drain into section 18-54-18-4. (Lowering of Wolf Creek.)
 Took levels from slough on section 23-55-12-4; found same could not be drained.

OTHER WORK.

Dug pits on diversion north of section 13-45-9-4.
 Progress report and sketches were forwarded to the Department at the time the surveys and examinations were made.

A number of the plans and field notes have already been sent in; the remainder are now in course of preparation.

I have the honour to be, Sir,

Your obedient servant,

LENNOX T. BRAY, A. D. L. S.

District Surveyor and Engineer.

Vegreville, Alta., December 31st, 1912.

REPORT RE EXPENSE OF RUNNING AUTOMOBILE.

During the past season, I found the automobile of great assistance in making examinations, etc., which were widely scattered in various parts of my district. Four thousand three hundred and fifty-four miles were covered with it, at an expense shown as follows:

Fuel (Gasoline, Oil, etc.)	\$127.15
Repairs	18.55
Installing batteries and cut-out	31.90
New batteries	2.50
Storage in garage (frosty weather)	4.25
	\$184.35

On closing the season's work, I rented a suitable place, and carefully laying it up, stored it here for the winter.

Your obedient servant,

LENNOX T. BRAY.

JOHN STOCKS, ESQ.,

Deputy Minister of Public Works,
Edmonton, Alta.

COAL MINES BRANCH

Inside Staff	{ Provincial Inspector. One Clerk-in-Charge. One Stenographer.
Outside Staff	{ Four District Inspectors. Two Superintendents of Mine Rescue Stations.

It will be noted from the following tables that the output for the year 1912 shows an increase of 1,751,785 tons over the year 1911, and an increase of 409,592 tons over the year 1910. The small output for the year 1911 was due to the fact that operations were discontinued in the large mines in the southern part of the province owing to a strike which extended for a period of practically eight months.

Year.	Output in tons for N.W.T. (Alberta and Saskatchewan).	Output in tons, Alberta.
1901	346,649	.....
1902	510,674	.....
1903	622,939	.....
1904	782,931	.....
1905 .....	.....	811,228
1906 .....	.....	1,385,000
1907 .....	.....	1,834,745
1908 .....	.....	1,845,000
1909 .....	.....	2,174,329
1910 .....	.....	3,036,757
1911 .....	.....	1,694,564
1912 .....	.....	3,446,349

The above figures show that there has been an increase during the year 1912 of 103.37 per cent. over the year 1911, and an increase of 13.48 per cent. over the year 1910.

CLASSIFICATION OF OUTPUTS DURING THE YEAR 1912.

	Tons.
Lignite Coal	1,341,389
Bituminous Coal	1,926,371
Anthracite Coal	178,589
Coal used in coke production	170,818
Coke produced	105,684
Briquettes produced	90,000

The above table shows there has been an increase in the output of Lignite coal 39.04 per cent. over the year 1911, and 52.78 per cent. over the year 1910, and an increase in the output of Bituminous coal of 196.48 per cent. over the year 1911 and 1.55 per cent over the year 1910, and an increase in the output of Anthracite coal of 122.90 per cent. over the year 1911 and a decrease of 31.78 below that of the year 1910.

The following table indicates how the Bituminous coal outputs from the different inspection districts in the province were disposed of:

Tons of 2,000 lbs.	Crow's Nest Pass	Cal- gary	Leth- bridge	Edmon- ton	Total
Sold for consumption in Al- berta	1,081,657	245,714	.....	125,636	1,453,007
Sold for consumption in other provinces	98,399	.....	.....	.....	98,559
Sold for export to the United States	86,682	.....	.....	.....	86,682
Total Sales	1,266,738	245,714	.....	125,636	1,638,088
Used in making coke	170,818	.....	.....	.....	170,818
Used under colliery boilers..	79,533	11,510	.....	4,420	95,463
To Stock	7,727	2,215	.....	12,060	22,002
Total	1,524,816	259,439	.....	142,116	1,926,371

The following table indicates how the Anthracite coal and Briquette outputs of the province were disposed of:

Tons of 2,000 lbs.	Calgary District.	
	Coal.	Briquettes.
Sold for consumption in Alberta	21,700	60,000
Sold for consumption in other Provinces	12,589	29,920
Sold for export to the United States	300	80
Total Sales	34,589	90,000
Used under Colliery boilers	36,000	.....
Used in making Briquettes	108,000	.....
Total	178,589	90,000

The following table indicates how the Lignite coal outputs from the different inspection districts in the province were disposed of:

Tons of 2,000 lbs.	Crow's Nest Pass	Cal- gary	Leth- bridge	Edmon- ton	Total
Sold for consumption in Al- berta		77,181	206,584	343,744	627,539
Sold for consumption in other provinces		8,278	397,821	77,033	483,132
Sold for export to the United States			6,141	.....	6,141
Total Sales		85,459	610,546	420,807	1,116,812
Used under colliery boilers.		1,678	112,126	17,694	131,508
Slack		1,738	38,015	53,266	93,069
Total Output		88,935	760,687	491,767	1,341,389

The following table indicates how the output of Coke was disposed of:

	Tons of 2,000 lbs.
Sold for consumption in Alberta	1,987
Sold for consumption in other Provinces	96,951
Sold for export to the United States	6,706
Total Sales	105,644
For Colliery use	40
Total Output	105,684

The Crow's Nest Pass is the only district in the province in which Coke is produced.

The following summary shows the total sales of Coal, Briquettes and Coke of the province:

Tons of 2,000 lbs.	Sold for Consumption in Alberta	Sold for Consumption in other Provinces	Sold for Export to United States	Total
Bituminous coal	1,453,007	98,559	86,682	1,638,088
Anthracite coal	21,700	12,589	300	34,589
Lignite coal	627,539	483,132	6,141	1,116,812
Total Sales	2,102,246	594,280	93,123	2,789,489
Briquettes	60,000	29,920	80	90,000
Coke	1,987	96,951	6,706	105,644

The following table shows the classification of persons employed above and below ground in the Bituminous coal fields:

AVERAGE NUMBER EMPLOYED.

Character of Labour	Crow's Nest Pass Dist.		Calgary District		Edmonton District		Total	
	Above	Below	Above	Below	Above	Below	Above	Below
Supervision and clerical assistance	69	51	16	16	14	12	99	79
Miners and Helpers	..	1086	..	309	..	191	..	1586
Mechanics or skilled labour	217	44	29	10	25	6	271	60
Other employees	383	533	77	71	60	24	520	628
Total	669	1714	122	406	99	233	890	2353

The following table shows the classification of persons employed above and below ground in the Lignite coal fields:

AVERAGE NUMBER EMPLOYED.

Character of Labour	Calgary District		Lethbridge District		Edmonton District		Total	
	Above	Below	Above	Below	Above	Below	Above	Below
Supervision and Clerical assistance	23	30	50	42	58	46	131	118
Miners and helpers	..	323	..	836	..	659	..	1818
Mechanics or skilled labour	25	3	99	35	83	20	207	58
Other employees	20	5	192	179	147	105	359	289
Total	68	361	341	1092	288	830	697	2283

The following table shows the classification of persons employed above and below ground in the Bituminous, Anthracite and Lignite coal fields, respectively:

AVERAGE NUMBER EMPLOYED.

Character of Labour	Bituminous		Anthracite		Lignite		Total	
	Above	Below	Above	Below	Above	Below	Above	Below
Supervision and clerical assistance	99	79	10	8	131	118	240	205
Miners and Helpers	..	1586	..	137	..	1818	..	3541
Mechanics or skilled labour	271	60	53	..	207	58	531	118
Other employees	520	628	150	80	359	289	1029	997
Total	890	2353	213	225	697	2283	1800	4861

PER CAPITA PRODUCTION OF MINES.

Year	Tons of 2,000 lbs				
	Gross tons of coal mined	Total No. of men employed	Tons of coal mined per man employed	No. of men employed underground	Tons of coal mined per man employed underground
1906	1,385,000	2,800	494	2,000	692
1907	1,834,745	3,600	509	2,700	679
1908	1,845,000	3,780	488	2,681	688
1909	2,174,329	5,207	417	3,893	566*
1910	3,036,757	5,818	504	4,090	742
1911	1,694,564	6,689	253	4,517	375**
1912	3,446,349	6,661	517	4,861	708

* During the year 1909 a strike affecting all the larger mines in the province lasted for a period of three months.

** During the year 1911 a strike affecting all the larger mines in the province lasted for a period of eight months.

SUMMARY OF STATISTICS FOR YEAR 1912.

Number of mines at present in operation	243
Number of new mines opened	46
Number of mines abandoned	8
Number of tons of coal mined	3,446,349
Number of tons of coke produced	105,684
Number of tons of briquettes produced	90,000
Average number of persons employed inside mines	4,861
Average number of persons employed outside mines	1,800
Average number of persons employed inside the mines during the month of December	5,279
Average number of persons employed outside the mines during the month of December	1,981
Number of separate accidents causing loss of life	21
Number of deaths caused by accidents inside the mines	16
Number of deaths caused by accidents outside the mines	5
Number of serious accidents inside the mines	33
Number of serious accidents outside the mines	5
Number of slight accidents inside the mines	52
Number of slight accidents outside the mines	5
Number of Mine Managers' certificates issued	12
Number of Pit Boss' certificates issued	12
Number of Fire Boss' certificates issued	37

NUMBER OF MISS-FIRE SHOTS RECORDED.

District	By Electricity	By Fuse	Total
Crow's Nest Pass	734	288	1022
Lethbridge	184	38	222
Calgary	88	388	476
Edmonton	133	355	488
Total	1139	1069	2208

No statistics are available as to the causes of the miss-fires.

The following table shows the number of tons of coal produced per pound of explosive used in each district:

District	Number of tons of coal produced	Number of lbs. of Explosive used	Number of tons of coal pro- duced per lb. of explosive used
Crow's Nest Pass	1,524,816	244,583	6.23
Lethbridge	760,687	143,200	5.31
Calgary	526,963	120,127	4.38
Edmonton	633,883	187,296	3.38
Total	3,446,349	695,206	4.95

EXPLOSIVES.

The following tables showing the quantity of the various kinds of explosives used during the year in mines, the estimated number of shots fired, the methods of firing them and the number of miss-fires recorded, have been compiled from returns furnished by the mine owners:

QUANTITY OF EXPLOSIVES USED IN LBS.

Name of Explosive	Crow's Nest Pass	Lethbridge	Calgary	Edmonton	Total
Black powder .....	.....	121,180	48,102	133,479	302,761
Monobel	200,322	13,190	59,265	44,737	317,514
Samsonite .....	.....	.....	11,520	.....	11,520
Dynamite	44,261	8,830	1,240	9,080	63,411
Total	244,583	143,200	120,127	187,296	695,206

ESTIMATED NUMBER OF SHOTS FIRED.

District	By Elec- tricity	By Fuse Igniter	By Shot- Firer's Lamp	By other Fuse	Total
Crow's Nest Pass	152,356	21,894	20,760	2,525	197,535
Lethbridge	27,730	4,250	.....	106,741	138,721
Calgary	64,677	12,678	5,360	50,408	133,123
Edmonton	31,508	55,384	2,300	85,558	174,750
Total	276,271	94,206	28,420	245,232	644,129

MINES OPENED DURING THE YEAR 1912.

No.	ADDRESS	OPERATED BY	CHARACTER OF COAL
331	Bow Island	A. E. Mitchell	Lignite
332	Redcliff	Redcliff Clay Products Co. Ltd.	"
333	Whitla	Richard See	"
334	Suffield	R. Black	"
335	Drumheller	Vulcan Coal Co.	"
336	Medicine Hat ...	E. Gardner	"
337	Trochu	Frank Heyland	"
338	Trochu	Alex. Halkett	"
339	Edmonton	McLeod Collieries, Ltd.	"
340	Tofield	Dobell Coal Company	"
341	Prosby	Prosby Coal Mine	"
342	Seven Persons ..	R. C. Foote	"
343	Lethbridge	A. J. McGuire	"
344	Winnifred	Perry Salisbury	"
345	Bow Island	H. S. Henry	"
346	Calgary	Rosedale Coal & Clay Products Ltd. ..	"
347	Calgary	Rose Deer Coal Mining Co.	"
348	Munson	J. Niesner & I. N. Daly	"
349	Drumheller	Drumheller Coal Co. Ltd.	"
350	Prairie Grange ..	Northern Construction Co.	"
351	Legal	W. Fortin	"
352	Gainford	John Cameron	"
353	Webber	William Roberts	"
354	Delia	Hand Hill Coal Co.	"
355	Munson	Munson Collieries	"
356	Medicine Hat ...	Amos Stauffer	"
357	Hillspring	Thomas Nash	"
358	Winnifred	W. J. Manary	"
359	Black Diamond ..	J. A. Grant	"
360	Standard	Standard Coal & Development Co. ...	"
361	Priddis	Joseph Woolings	"
362	Longview	E. Little	"
363	Longview	L. F. Rathburn	"
364	Big Valley	A. Albertson	"
365	Brazeau	British Collieries, Ltd.	"
366	Grassy Lake	Joseph Holmes	"
367	Drumheller	Midland Collieries	"
368	Altorado	J. H. Duncan	"
369	Strathcona	J. Petrie	"
370	Prosby	Stephen Smidt	"
371	Bow Island	O. J. Crouch	"
372	Diamond City ...	Bathurst Coal Co. Ltd.	"
373	Trochu	Hedrich & Halbert	"
374	Camrose	Schmidt & Wilson	"
375	Garden Plain ...	T. A. Kaul	"
376	Perbeck	Nelson & Johnson	"

MINES OPERATED DURING THE YEAR 1912.

No.	ADDRESS	OPERATED BY	CHARACTER OF COAL
2	Canmore	The Canmore Coal Co. Ltd.	Bituminous
3	Lethbridge	Canadian Pacific Railway Co.	Lignite
8	Clover Bar	William Daly	"
9	Edmonton	Clover Bar Coal Co. Ltd.	"
28	Namao	Stewart & Campbell	"

MINES OPERATED DURING THE YEAR 1912.—Continued.

No.	ADDRESS	OPERATED BY	CHARACTER OF COAL
29	Ellerslie	White Star Coal Co. Ltd.	Lignite
30	Black Diamond ..	A. D. McPherson	Bituminous
32	Cardiff	The Cardiff Collieries, Ltd.	Lignite
37	Redcliff	H. & W. Ansley	"
40	Hillcrest	Hillcrest Collieries, Ltd.	Bituminous
43	Edmonton	Humberstone Coal Co. Ltd.	Lignite
46	Edmonton	Love & Cameron	"
48	Frank	The Canadian Coal Consolidated, Ltd.	Bituminous
49	Edmonton	Edmonton Standard Coal Co. Ltd.	Lignite
53	Carbon	Knee Hill Coal Co. Ltd.	"
54	Lethbridge	James Ashcroft	"
55	Lethbridge	George F. Russell	"
56	Lethbridge	Thomas H. Baker	"
57	Pincher Creek ..	Thomas Nash	Bituminous
59	Lundbreck	The Galbraith Coal Co. Ltd.	Semi-Bituminous
64	Lille	West Canadian Collieries, Ltd.	Bituminous
69	Clover Bar	Keith & Fulton	Lignite
72	Gleichen	Blackfoot Indian Reserve	"
74	Edmonton	Milner & Shoeman	"
75	Namao	Lauchlan & Spedding	"
77	Lundbreck	Breckenridge & Lund Coal Co. Ltd.	Semi-Bituminous
80	Bankhead	Bankhead Mines, Ltd.	Anthracite
82	Taber	Eureka Coal Co. Ltd.	Lignite
87	Bellevue	West Canadian Collieries, Ltd.	Bituminous
88	Coleman	International Coal & Coke Co. Ltd.	"
90	Clover Bar	Byers Brothers	Lignite
91	Clover Bar	R. P. Ottewell	"
92	Royal View	Royal Collieries, Ltd.	"
101	Namao	George E. Fiske	Bituminous
103	Carstairs	G. H. Knowlton	Lignite
104	Diamond City ..	Diamond Coal Co.	"
105	Taber	Canada-West Coal Co. Ltd.	"
106	Taber	Domestic Coal Co.	"
112	Three Hills	Three Hills Coal & Development Co. Ltd.	"
113	Three Hills	Nichols & Abriel	"
114	Elcan	The Independent Coal Co. Ltd.	"
115	Carbon	Dodds, Currie & Hoding	"
116	Three Hills	Charles Catchpole	"
120	High River	B. E. Parton	Bituminous
126	Passburg	The Leitch Collieries, Ltd.	"
129	Cardiff	The Alberta Coal Mining Co. Ltd.	Lignite
130	Elcan	Alberta Consolidated Coal Co. Ltd.	"
131	Elcan	Elcan Coal Co.	"
132	Taber	Canadian Pacific Railway Co.	"
133	Bellevue	Maple Leaf Coal Co.	Bituminous
134	Reid Hill	Henderson Brothers	Lignite
135	Carmangay	Durham Collieries, Ltd.	"
136	Long Coulee	Henry Therriault	"
137	Reid Hill	W. J. Greenaway	"
142	Three Hill	George Watson	"
143	Bowville	W. J. Bell	"
145	Pincher Creek ..	Pincher Creek Coal Mining Co.	Bituminous
148	Edmonton	Western Coal Co.	Lignite
149	Tofield	I. J. McDevitt	"
150	Tofield	Tofield Coal Co. Ltd.	"
151	Reid Hill	J. W. Brown	"
153	Burmis	Davenport Coal Co. Ltd.	Bituminous
155	Edmonton	Dawson Coal Co. Ltd.	Lignite
162	Magrath	Magrath Coal Co.	"
165	Redcliff	Redcliff Brick & Coal Co. Ltd.	"
166	Bullocksville ..	J. P. Dweaks	"
167	Content	R. W. K. Cousins	"

MINES OPERATED DURING THE YEAR 1912.—*Continued.*

No.	ADDRESS	OPERATED BY	CHARACTER OF COAL
168	Nevis	Beaver Dam Coal Co.	Lignite
169	Cochrane	The Mitford (Calgary) Colliery Co. Ltd.	Sem.-Bituminous
170	Elcan	Rocks Springs Coal & Brick Co. Ltd.	Lignite
174	Lethbridge	Lethbridge Collieries, Ltd.	"
176	Magrath	Bradshaw Mining Co.	"
177	Edmonton	Twin City Coal Co. Ltd.	"
178	Namao	Nash & Williams	"
179	Coutts	Joseph Oborn	"
180	Grassy Lake	J. J. Mills	"
181	Taber	Monarch Collieries Co. Ltd.	"
183	Camrose	The Stoney Creek Collieries, Ltd.	"
185	Bow Island	David H. Long	"
187	Carbon	Black Diamond Coal Co.	"
189	Carbon	Hedstrom Brothers	"
192	Lethbridge	City of Lethbridge	"
193	Blairmore	West Canadian Collieries, Ltd.	Bituminous
194	Ghost Pine Creek	Robert Cook	Lignite
196	Namao	Dawkins & Co.	"
198	Champlon	W. E. Watkins	"
199	Pincher Creek	Western Coal & Coke Co.	Bituminous
201	Taber	The Golden West Coal Mining Co. Ltd.	Lignite
202	Taber	The Superior Coal Co. Ltd.	"
203	Royal View	New Barnes Coal Co. Ltd.	"
204	Coleman	McGillivray Creek Coal & Coke Co. Ltd.	Bituminous
205	Bow Island	A. A. Lindquist	Lignite
207	Burmis	The Carbon Hill Coal & Coke Co.	Bituminous
209	Burmis	The Head Syndicate, Ltd.	"
212	Halkirk	Charles Hilker	"
213	Grassy Lake	Sunlight Coal Co.	"
214	Three Hills	Dick & Halbert	"
218	Reid Hill	Ashmore & Ellis	"
219	Big Prairie	G. H. Knowlton	Bituminous
220	Bickerdike	Yellowhead Pass Coal & Coke Co. Ltd.	"
221	Riviere Que Barre	Riviere Qui Barre Coal Co.	Lignite
222	Pincher Creek	William Macfarlane	Bituminous
223	Lethbridge	Adams Coal Mine Co.	Lignite
224	Reid Hill	Henderson Brothers	"
226	Brooks	Prairie Coal Co. Ltd.	"
227	Entwistle	The Pembina Coal Co.	"
228	Taber	Belly R'ver Collieries, Ltd.	"
229	Taber	Superior Coal Co. Ltd.	"
232	Bawlf	Bawlf Collieries, Ltd.	"
233	Heatherwood	Pacific Pass Coal Fields, Ltd.	Bituminous
234	Eyremore	Nap Larosee	Lignite
236	Medicine Hat	The Drowning Ford Coal Co.	"
237	Cardiff	The Banner Coal Co. Ltd.	"
238	Bow Island	Moses Simpson	"
239	Winnifred	J. O'Neill	"
240	Halkirk	Karaus & Steibritz	"
241	Camrose	Spicer Coal Co.	"
242	Bawlf	C. P. Potter	"
243	Castor	Battle Axe Coal Mine	"
244	Camrose	Stoney Creek Collieries, Ltd.	"
245	Hastings Coulee	Bish Bros. & Leggett	"
246	Castor	A. D. McCormack	"
247	Coaldale	Chinook Coal Co. Ltd.	"
248	Hastings Coulee	Bish Bros. & Co.	"
249	Wanda	J. M. Schares	"
250	Round Hill	Round Hill Collieries, Ltd.	"
251	Daysland	Julius Wilkinson	"
252	Tofield	Tofield Coal Co. Ltd.	"
253	Pincher Creek	A. D. McKinnon	Bituminous

MINES OPERATED DURING THE YEAR 1912.—*Continued.*

No.	ADDRESS	OPERATED BY	CHARACTER OF COAL
254	Lethbridge	Heighes Bros.	Lignite
255	Gaetz Valley ...	T. D. Conger	"
256	Red Deer	Brazeau Collieries, Ltd.	Bituminous
257	Feldholme	Goodhall & Park	Lignite
259	Milk River	Erickson Bros.	"
260	Wabanum	Connor Coal Mining Co. Ltd.	"
261	Coleman	P. A. Paulson	Bituminous
262	Rose Lynn	Smith, Oscar & McGarry	Lignite
263	Wabanum	Security Coal Mines Co. Ltd.	"
264	Stavely	Stavely Coal Mining Co.	"
265	Bow Island	W. H. Simanton	"
267	St. Albert	St. Albert Collieries, Ltd.	"
268	Halkirk	Charles Strader	"
270	Bow Island	Arblaster & Lloyd	"
271	Milk River	S. Brockhouse	"
272	Bow Island	A. C. Gage	"
273	Halkirk	David Bros. Coal Co.	"
274	Halkirk	Halkirk Collieries	"
275	Castor	Castor Coal Co. Ltd.	"
276	Diamond City ..	Diamond Sunrise Coal Co.	"
277	Masinassin	Duncan Kippen	"
279	Milk River	Daniel G. McKay	"
280	Pocahontas	Jasper Park Collieries, Ltd.	Bituminous
281	Carstairs	G. H. Knowlton	"
282	Bickerdike	Mountain Park Coal Co. Ltd.	"
283	Clover Bar	Great West Coal Co. Ltd.	Lignite
284	Kimball	Big Chief Coal Mining Co. Ltd.	"
285	Keho	Thomas Davis	"
286	Big Valley	Square Deal Mercantile Co.	"
288	Foreman	Richard Airey	"
289	Gadsby	Amour Gray	"
290	Big Valley	R. T. Davidson & Thomsle	"
291	Gadsby	James Wagner	"
292	Pincher Creek ..	John Morris	Bituminous
293	Burmis	Coal Securities, Ltd.	"
294	Grassy Lake	George Gibson	Lignite
295	Pincher Creek ..	J. H. Owen	Bituminous
296	Thigh Hill	William Ellis	Lignite
299	Strathmore	Roseby Farming & Development Co. ..	"
300	Pincher Creek ..	Bullock Coal Mining Co.	Bituminous
301	Big Valley	U. G. Robinson	Lignite
302	Wetaskiwin	Anderson & Rosenroll	"
303	Three Hills	George Watson	"
304	Castor	Hugh D. McLean	"
305	Cochrane	Bonnie Brae Coal & Quarries, Ltd. ...	Sem-Bituminous
307	Long Coulee	Wm. John Sanderson	Lignite
308	Lucky Strike	H. B. Hughson	"
309	Rose Lynn	J. A. Haeckl	"
310	Pocahontas	North Alberta Coal Syndicate	Bituminous
311	Kimball	G. S. Giles	Lignite
312	Gadsby	John Hoffman	"
314	Lignite	Calgary Collieries, Ltd.	"
315	Trochu	David Halbert	"
316	Cardston	Cardston Coal & Coke Co.	"
317	Drumheller	Newcastle Coal Co. Ltd.	"
318	Carbon	Duncan McKenzie	"
319	Wabanum	Lake View Coal Co.	"
320	Gadsby	Rider Brothers	"
321	Ardley	Col. James A. Walker	"
322	Trochu	Trochu Coal Co. Ltd.	"
323	Bow Island	J. W. Hines	"
324	Winnifred	R. A. Salisbury	"

MINES OPERATED DURING THE YEAR 1912.—*Continued.*

No.	ADDRESS	OPERATED BY	CHARACTER OF COAL
325	Castor	Excelsior Coal Co.	Lignite
326	DeWinton	W. M. Davis	Bituminous
327	Trochu	Ostheller & Kruger	Lignite
328	Perbeck	George C. Yard	"
329	Castor	John Heney	"
330	Pincher Creek	A. Link	Bituminous
331	Bow Island	A. E. Mitchell	Lignite
332	Redcliff	Redcliff Clay Products Co. Ltd.	"
333	Whitla	Richard See	"
334	Suffield	Robert Black	"
335	Drumheller	Vulcan Coal Co.	"
336	Medicine Hat	R. Gardner	"
337	Trochu	Frank Heyland	"
339	Bickerdike.....	McLeod Collieries, Ltd.	Bituminous
340	Tofield	The Dobell Coal Co. of Tofield, Ltd., ..	Lignite
341	Prosby	Ferdinand Friedenbergl	"
342	Seven Persons	R. C. Foote	"
343	Lethbridge	A. J. McGuire	"
344	Winnifred	Perry Salisbury	"
345	Bow Island	Henry Coal Co.	"
346	Calgary	Rosedale Coal & Clay Products Co., ..	"
347	Drumheller	Rose Deer Coal Mining Co. Ltd.	"
348	Munson	Neisner & Daly	"
349	Drumheller	Drumheller Coal Co. Ltd.	"
350	Prairie Grange	Northern Construction Co.	Bituminous
351	Legal	W. Fortin	Lignite
352	Gainford	John Cameron	"
353	Weber	William Roberts	"
354	Delia	Hand Hill Coal Co.	"
355	Munson	Munson Collieries	"
356	Medicine Hat	Amos Stauffer	"
357	Hills Spring	Thomas Nash	Bituminous
358	Winnifred	W. J. Manary	Lignite
359	Black Diamond	John A. Grant	Bituminous
360	Standard	The Standard Coal & Development Co.	Lignite
361	Priddis	Joseph Woolings	"
362	Long View	Edward Little	"
363	Long View	L. F. Rathburn	"
364	Big Valley	Al Albertson	"
365	Red Deer	British Collieries, Ltd.	Bituminous
366	Grassy Lake	Joseph Holmes	Lignite
367	Drumheller	Midland Collieries	"
368	Altorado	J. H. Duncan	"
369	Strathcona	J. Petrie	"
370	Prosby	Stephen Schmidt	"
371	Bow Island	O. J. Crouch	"
372	Diamond City	Bathurst Coal Co. Ltd.	"
373	Trochu	Hedrich & Halbert	"
374	Camrose	Schmidt & Wilson	"
375	Garden Plain	T. A. Kaul	"
376	Perbeck.....	Nelson & Johnson	"

MINES ABANDONED DURING 1912.

- Mine No. 91—Operated by R. P. Ottewell, Clover Bar, south-west quarter section 17, township 53, range 23, west of 4th M.
 Mine No. 239—Operated by J. O'Neill, Winnifred, Legal Subdivisions 10 and 11 of section 35, township 12, range 10, west of 4th M.
 Mine No. 257—Operated by Messrs. Goodhall & Park, Fieldholme, on sections 6 and 7, township 23, range 14, west of 4th M.
 Mine No. 297—Operated by F. M. Ginther, Medicine Hat, south-west quarter of section 12, township 13, range 9, west of 4th M.
 Mine No. 305—Operated by the Bonnie Brae Coal & Quarries, Ltd., Cochrane, section 5, township 26, range 4, west of 5th M.
 Mine No. 308—Operated by H. B. Hughson, Lucky Strike, section 10, township 3, range 11, west of 4th M.
 Mine No. 336—Operated by E. Gardner, Medicine Hat, sections 3 and 10, township 16, range 5, west of 4th M.
 Mine No. 351—Operated by W. Fortin, Legal, section 25, township 57, range 25, west of 4th M.

MINES REOPENED DURING 1912.

- Mine No. 91—Operated by R. P. Ottewell, Clover Bar. Formerly operated by R. P. Ottewell, Clover Bar.
 Mine No. 227—Operated by Pembina Coal Co., Ltd., Entwistle. Formerly operated by Pembina Coal Co., Ltd., Entwistle.

LIST OF CANDIDATES Who Successfully Passed the Examinations Held During the Year 1912.

NAME	ADDRESS	NO. OF CERT.
Mine Managers.		
Allen, Peter	Coleman	72
Barnes, Arthur Winfield	Passburg	74
Guernsey, Forbes Wm.	Bankhead	80
Johnson, Moses	Taber	79
Marshall, John William	Clover Bar	78
Musgrove, William	Canmore	76
Pitcher, Norman Chas.	Lethbridge	75
Pickles, William	Cardiff	77
Willey, Edward	Fernie, B.C.	71
Watson, William	Coleman	73
Pit Bosses		
Barclay, Andrew	Frank	111
Bridge, Edward	Bellevue	99
Brown, Alan James	Pocahontas	105
Carson, James	Spring Point	...
Davidson, David	Blairmore	94
Davies, Thomas Owen	Pincher Creek	104
Garbett, Richard	Corbin, B.C.	100
Hartley, William	Bankhead	114
Hughes, Daniel John	Diamond City	110
Hunter, Henry	Edmonton	102
Hutton, John	Bellevue	93
Jones, Peter	Lethbridge	92
Jordan, William	Taber	112
Keith, Daniel John	Coalhurst	107

LIST OF CANDIDATES Who Successfully Passed the Examinations Held
During the Year 1912.—*Continued.*

NAME	ADDRESS	NO. OF CERT.
Letcher, William Martin	Bankhead	96
Massey, Harry	Corbin, B.C.	116
Mather, Thomas	Bickerdike	106
Muir, David	Pincher Creek	108
Parry, Thomas	Coleman	109
Pioton, Daniel	Passburg	...
Richards, Samuel	Corbin, B.C.	98
Schmidt, Otto Prentiss	Camrose	115
Scott, Alexander	Pocahontas	103
Shanks, David	Coal Creek, B.C.	117
Strickland, Thomas	Clover Bar	101
Thompson, Joseph	Coleman	97
Watters, Alexander Grant	Pocahontas	95
Welch, James Douglas	Taber	113
Fire Bosses		
Allen, William Charles	Coleman	205
Archibald, David	Bickerdike	222
Berford, Edward	Elcan	196
Blakemore, Roydon Ellers	Edmonton	227
Clark, Robert	Lethbridge	212
Coutts, George	Lethbridge	210
Cox, John	Coleman	193
Cranston, Michael	Clover Bar	218
Crawford, John	Beaver Mines	197
Digman, John H.	Royal View	198
Draper, Robert,	Cochrane	214
Duncan, Ninian Selkirk	Cochrane	211
Gorton, James	Hillcrest	203
Harries, Henry Cecil	Coleman	209
Hunter, Alexander Brunton	Coleman	207
Hutchison, Peter	Frank	202
Jones, Peter	Lethbridge	195
Jordan, William	Taber	220
Joyce, Michael	Birkerdike	224
Kemp, David	Beaver Mines	201
Laight, L.	Lethbridge	...
Littler, Mathew	Michel, B.C.	226
Mackie, John	Corbin, B.C.	221
Melling, Peter	Coalhurst	208
McDonald, James Ottis Cove	Coleman	225
McGeough, Joseph Patrick	Bellevue	219
Oakes, Robert	Michel, B.C.	...
Owen, Thomas	Michel, B.C.	...
Park, William	Lethbridge	194
Queen, Andrew Mitchell	Lethbridge	228
Radford, James	Bellevue	200
Shaw, Eli	Canmore	...
Sherratt, Owen (Sr.)	Coleman	199
Smith, Thomas	Hillcrest	216
Sopwith, Reginald S.	Burmis	...
Stephenson, Joseph	Lethbridge	...
Stephenson, Thomas	Lethbridge	...
Stobbs, Joseph	Diamond City	217
Thomas, Isaac	Coleman	204
Tully, Thomas	Fernie, B.C.	215
Williams, Walter Edward	Clover Bar	213
Williams, John Jenkyn	Bickerdike	223

CERTIFICATES Issued by Government of the Northwest Territories and
by the Government of the Province of Alberta.

NAME	ADDRESS	NO. OF CERT.
Mine Managers		
Addie, W.	Lundbreck	**19
Alderson, Frederick Dunn	Lethbridge	*40
Allen, Peter	(Deceased)	*52
Ashburner, Edward	Coleman	*72
Aspinall, Francis	Bellevue	*22
Bradshaw, G. B.	Nanaimo, B.C.	**61
Broome, G. H.	New Zealand	**46
Bastian, J.	Taber	**43
Brown, J.	Banff	**18
Baxter, Andrew W.	Lethbridge	*47
Barnes, Arthur Winfield	Passburg	*74
Colville, A.	(Deceased)	**52
Collins, W. F.	Blairmore	**24
Coulthard, R. W.	Blairmore	†8
Coulthard, R. W.	Blairmore	†24
Church, J. A. H.	Frank	*11
Cunningham, G. F.	Edmonton	*7
Crowder, J.	Coleman	*38
Christianson, Peter	Edmonton	*48
Clyne, James	Canmore	*69
Drinnan, R. G.	Fernie, B.C.	**29
Dixon, G. H.	Coleman	*3
Dunn, A. C.	Edmonton	*18
Darbyshire, J.	Bellevue	*35
Davidson, W. A.	Coleman	*25
Davis, David	Coleman	*62
Emmerson, J.	Frank	**50
Emmerson, C.	Bellevue	**49
Elliott, D.	Blairmore	**20
Evans, D.	Michel, B.C.	*1
Ellis, W.	Nanton	*15
Evans, D.	Michel, B.C.	†14
Flint, W. G.	Canmore	**56
Finlayson, J.	Frank	**30
Fraser, N.	Michel, B.C.	†1
Fraser, G. L.	Coleman	*1
Green, R.	Blairmore	**58
Graham, C.	Nanaimo	†7
Givin, Homer Holt	Royal View	*57
Gray, David	Cochrane	*65
Guernsey, Forbes William	Bankhead	*80
Henrietta, Chas. M.	Byseville, Ohio	**26
Heathcote, Elijah	Coal Creek, B.C.	**23
Hargreaves, James	Taber	**9
Hamilton, William L.	Passburg	**4
Hardie, W. D. L.	Lethbridge	**2
Huntrods, E. S. F.	Taber	†3
Holden, James	Bankhead	*14
Hamilton, Robert	Lundbreck	*4
Horne, Thos.	Coleman	*6
Harrison, Stephen	Lethbridge	*16
Hart, John	Edmonton	*23
Horne, Robert	Coleman	*12
Hargreaves, James	Taber	†48
Howells, Nathaniel	Bellevue	*64
Jones, Samuel A.	Lethbridge	**57
John, John	Fernie, B.C.	**44
Jones, David	Strathcona	*67
Johnson, Moses	Taber	*79
Keith, Thos.	Taber	*20

CERTIFICATES Issued by Government of the Northwest Territories and
by the Government of the Province of Alberta.—*Continued.*

NAME	ADDRESS	NO. OF CERT.
Kerr, Alex	Tonkin, B.C.	**27
Knox, Thos. K.	Coal Creek, B.C.	*28
Kellock, George	Coleman	*59
Kinsman, Alexander	Hosmer, B.C.	*70
Little, John	Coal Fields	**5
Livingstone, Robert	Lethbridge	**16
Lewellyn, D. R.	Michel, B.C.	**42
Little, William F.	Canmore	†4
Lee, Robert John	Elcan	*56
Morris, James J.	Canmore	**3
Morris, Syrus	Frank	**12
Manley, Henry Lewis	Fernie, B.C.	**41
Morton, T. R.	(Deceased)	**63
Mills, Thos.	Namaimo, B.C.	**35
Marsh, John	Taber	†6
Moore, Samuel M.	Bankhead	*26
Maxwell, Wm.	Pincher Creek	*27
Millar, Andrew A.	Edmonton	*54
Musgrove, Wm.	Canmore	*76
Marshall, John Wm.	Clover Bar	*78
McEvoy, James	Fernie, B.C.	**17
McVicar, Samuel	Frank	**59
McLean, Donald	Ladysmith, B.C.	**62
McMillan, J. H.	Lethbridge	*17
McLenhan, J. A.	Strathcona	*39
McDonald, Jno. R.	Medicine Hat	*29
Macaulay, Donald A.	Coleman	*42
McCullouch, James	Corbin, B.C.	*41
McDonald, Duncan	Canmore	*60
O'Donnell, Thos.	Kipp	*61
Pearson, Robinson	Fernie, B.C.	**11
Parker, Jno. L.	North Star	**25
Pearson, R. N.	Frank	**38
Powell, Jno. W.	Coleman	**60
Pitcher, Norman Chas.	Lethbridge	*75
Pickles, Wm.	Cardiff	*77
Quigley, James S.	Hillcrest	*21
Reynolds, E. E.	Lethbridge	**33
Richards, J. A.	Edmonton	**39
Russell, Thos.	Victoria, B.C.	**45
Raisbeck, Luke	Taber	**47
Reed, Thos.	Northfield	†5
Robertson, Jno.	Frank	†2
Robertson, Jno.	Lundbreck	*9
Richards, Clifton C.	Bankhead	*36
Russell, Jno.	Clover Bar	*44
Reid, John Kallum	Lethbridge	*53
Roberts, Edward Iver	Strathcona	*55
Smith, Frank B.	Edmonton	*7
Stockett, Thos. R. (Jr.)	Nanaimo, B.C.	**10
Simister, Chas.	Fernie, B.C.	**21
Strachan, Robert	Fernie, B.C.	**31
Shepherd, F. H.	Victoria, B.C.	**34
Symons, C. C.	Coal Fields, B.C.	**37
Sharp, Alex.	Rossland, B.C.	**53
Stockett, Lewis	Bankhead	**51
Stirling, John T.	Edmonton	*8
Scott, Alex.	Strathcona	*5
Sparrow, Edwin	Lundbreck	*13
Scott, Andrew N.	Edmonton	*19

CERTIFICATES Issued by Government of the Northwest Territories and
by the Government of the Province of Alberta.—*Continued.*

NAME	ADDRESS	NO. OF CERT.
Stevens, Leonard C.	Coal Creek, B. C.	*31
Saville, Enoch O.	Taber	*45
Shaw, Wm.	Canmore	*46
Stewart, Robert T.	Fernie, B.C.	*50
Shanks, Jno.	Coal Creek, B.C.	*51
Stevenson, Jno.	Lethbridge	*68
Thorne, Benjamin L.	Hosmer, B.C.	*32
Thain, Harry S.	Lethbridge	*34
Thomas, Jno. Ira	Edmonton	*49
Thomas, Willis P.	Diamond City	*58
Thomas, Jos. David	Passburg	*66
Whiteside, O. E. S.	Coleman	*66
White, E. Proctor	Lethbridge	*68
Wyllie, Jno. B.	(Deceased)	**13
Waite, Archi.	Taber	**15
Wilson, David G.	Hosmer, B.C.	**22
Wilson, Arthur R.	Lethbridge	**28
Wall, Wm. Hy.	Nanaimo, B.C.	**32
Williams, W. P.	Blairmore	**36
Wright, H. B.	Fernie, B.C.	*40
Wilkinson, George	Nanaimo, B.C.	**54
Weatherby, C.	Coleman	*2
Williams, T. H.	Taber	*10
Watters, Jno.	Bankhead	*30
Wark, S. D.	Passburg	*37
Willey, Edward	Fernie, B.C.	*71
Watson, Wm.	Coleman	*73
Pit Bosses		
Anderson, J.	Bellevue	*2
Aspinall, F.	Bellevue	*27
Allen, Peter	Coleman	*72
Bastian, T. W.	Bankhead	**27
Bowie, J.	Frank	*4
Bamling, J.	Diamond City	*44
Brockhouse, Israel B.	Milk River	*74
Bridge, Edward	Bellevue	*99
Brown, Alan James	Pocahontas	*105
Barclay, Andrew	Frank	*111
Chestnut, C.	Blairmore	*30
Corkill, T.	Michel, B.C.	**13
Crowder, J.	Coleman	*10
Clay, E.	Oxville	*28
Clark, J. C.	Blairmore	*49
Clyne, J.	Canmore	*53
Clemenson, Jno.	Bankhead	*58
Cooke, Jos.	Burmis	*66
Crowder, Harry	Coleman	*69
Coupland, George	Lundbreck	*77
Davies, D.	Coleman	**31
Duggan, R. G.	Taber	**19
Davis, A.	Lethbridge	**4
Dixon, S.	Lille	*24
Davies, S.	Coal Creek, B.C.	*18
Davies, J.	Coleman	*11
Dunn, J. P.	Strathcona	*9
Davis, J.	Lethbridge	*31
Davies, T.	Frank	*54
Davidson, David	Blairmore	*94
Davies, Thos. O.	Pincher Creek	*104

CERTIFICATES Issued by Government of the Northwest Territories and
by the Government of the Province of Alberta.—*Continued.*

NAME	ADDRESS	NO. OF CERT.
Emerson, C.	Bellevue	**3
Eccleston, W.	Michel, B.C.	*16
Fraser, G. L.	Coleman	**25
Flint, W. G.	Canmore	**16
Francis, J.	Taber	*29
Fox, A.	Taber	*42
Foster, W. R.	Michel, B.C.	*51
Green, R.	Blairmore	**17
Giffen, H. R.	Coal Fields, B.C.	**14
Gilliland, Wm.	Strathcona	*61
Garbett, Richard	Corbin, B.C.	*100
Hall, Oliver	Bellevue	**26
Harvie, Robert	Lethbridge	*1
Hutchinson, A. M.	Coleman	*6
Horne, Robert	Coleman	*12
Horswell, Jno.	Cardiff	*34
Howells, Nathaniel	Michel, B.C.	*55
Hallworth, Albert	Bellevue	*65
Hamilton, Allan	Pincher Creek	*78
Heeley, Wm. Grafton	Bickerdike	*80
Hill, James	Lethbridge	*84
Hutton, Jno.	Bellevue	*93
Hunter, Henry	Edmonton	*102
Hughes, Daniel Jno.	Diamond City	*110
Hartley, Wm.	Bankhead	*114
Jones, Samuel A.	Lethbridge	**18
Johnson, Moses	Taber	*46
Jones, David	Strathcona	*48
Jones, Peter	Lethbridge	*92
Jordon, Wm.	Taber	*112
Kerr, Jno.	Coal Fields	**33
Kelloch, Geo.	Coleman	*39
Kelloch, James	Coleman	*82
Keith, Jno. Daniel	Coalhurst	*107
Lowrie, Ralph	Frank	**34
Livingstone, Robt.	Lethbridge	**6
Livingstone, Jno. C.	Lethbridge	**5
Lee, Robt. Jno.	Grassy Lake	*56
Luck, George	Bellevue	*70
Letcher, Wm. M.	Bankhead	*96
Musgrove, Jno.	Canmore	**2
Musgrove, Jno.	Canmore	†9
Musgrove, Wm.	Canmore	†32
Miller, Jno. K.	Bankhead	**29
Morris, Jno.	Lundbreck	*8
Moore, Thos. E.	Eyremore	*17
Miard, Harry E.	Coal Creek, B.C.	*47
Munro, Wm. K.	Blairmore	*64
Murphy, Peter J.	Clover Bar	*76
Mather, Thos.	Bickerdike	*91
Muir, David	Pincher Creek	*106
Massey, Harry	Corbin, B.C.	*108
Morgan, Daniel	Edmonton	*116
McVicar, Samuel	Frank	**23
McKean, Jno. W.	Lethbridge	**24
McGregor, Alex.	Frank	†1
McKay, Donald	Bankhead	*3
McLennan, Jno. A.	Strathcona	*33
McElvie, James	Hosmer, B.C.	*43
McDonald, Duncan	Canmore	*60

CERTIFICATES Issued by Government of the Northwest Territories and
by the Government of the Province of Alberta.—*Continued.*

NAME	ADDRESS	NO. OF CERT.
McMillan, Donald	Pincher Creek	*71
MacDonald, James A.	Bellevue	*79
MacKay, Angus	St. Albert	*81
McIntyre, Jno. J.	Calgary	*88
Nicol, James	Frank	*36
Ostheidt, Gus.	Bankhead	*1
Oliphant, Jos. H.	Bellevue	*59
Phillips, Chas.	Frank	†20
Pearson, W. G.	Frank	†15
Parsons, T. Lloyd	Edmonton	*26
Pickles, Wm.	Edmonton	*35
Prentiss, Jno.	Lille	*45
Park, Stewart G.	Lethbridge	*57
Parker, Levi	Bellevue	*68
Powell, Albert E.	Strathcona	*85
Parry, Thos.	Coleman	*109
Quigley, Daniel H.	Lethbridge	*73
Rice, Awrey	Frank	†2
Roberts, D. E.	Coleman	*14
Rankin, George	Michel, B.C.	*41
Roberts, E. I.	Strathcona	*52
Ramsay, Peter M.	Lethbridge	*86
Roberts, Ebenezer	Bellevue	*87
Richards, Samuel	Corbin, B.C.	*98
Scott, Hugh	Lethbridge	*1
Steele, Thos.	Coleman	*12
Sequin, Jos. A.	Estevan	*22
Sparrow, Edwin	Lundbreck	*7
Shone, Samuel	Coleman	*23
Shaw, Wm.	Canmore	*21
Scott, Andrew N.	Edmonton	*19
Stewart, J. M.	Fernie, B.C.	*50
Sihvon, Wm.	Bellevue	*40
Sloan, Thos. W.	Burmis	*67
Shaw, John Thos.	Canmore	*75
Strickland, Thos.	Clover Bar	*101
Scott, Alex.	Pocahontas	*103
Schmidt, Otto Prentiss	Camrose	*15
Shanks, David	Coal Creek, B.C.	*117
Thomas, David	Bankhead (Deceased)	*28
Teppo, Herman	Bellevue	*15
Thomas, Jno.	Diamond City	*30
Thain, Harry S.	Lethbridge	*32
Thomas, Jos. D.	Hosmer, B.C.	*37
Taylor, Tom	Hillcrest	*62
Taylor, George Warren	Lethbridge	*83
Thomas, Jno.	Frank	*89
Tonge, Thos.	Pickerdike	*90
Thompson, Jos.	Coleman	*97
Williams, Thos. H.	Canmore	*8
Waite, Archl.	Taber	*10
Weatherby, Cory	Hillcrest	*11
Wilson, Wm. Geo.	Coleman	†3
Whitelaw, Thos.	Coleman	*25
Watters, Jno.	Bankhead	*22
Watkins, W. E.	Lille	*20
Watson, Wm.	Coleman	*20
Wright, J. S.	Canmore	*13
Winter, Archl.	Strathcona	*38
		*63

CERTIFICATES Issued by Government of the Northwest Territories and
by the Government of the Province of Alberta.—Continued.

NAME	ADDRESS	NO. OF CERT.
Watters, Alex. Grant	Pocahontas	*95
Welch, James D.	Taber	*113
Fire Bosses		
Anderson, J.	Frank	**13
Alderson, R. D.	Coleman	*17
Aspinall, F.	Bellevue	*32
Ashurst, W.	Coleman	*82
Adlam, Wm.	Hillcrest	*108
Archer, Roland	Hillcrest	*132
Allen, Wm. C.	Coleman	*205
Archibald, David	Bickerdike	*222
Bastian, T. W.	Bankhead	**30
Bansemmer, R.	Bankhead	*14
Barber, J.	Frank	*7
Burrows, C.	Frank	*40
Brownrigg, J. H.	Frank	*35
Brown, T.	Bankhead	*24
Blake, P.	Lundbreck	*23
Brovey, A. C.	Edmonton	*64
Boulton, W. E.	Bankhead	*48
Barnes, B. J.	Coal Creek, B.C.	*92
Besso, A.	Canmore	*80
Briscoe, Daniel	Hillcrest	*117
Blake, Henry	Bellevue	*133
Bradley, Thos.	Hillcrest	*138
Barber, James S.	Hillcrest	*144
Bovio, Michael	Bellevue	*146
Brown, Alan James	Cardiff	*163
Berford, Edward	Elcan	*196
Blakemore, Roydon Ellers	Edmonton	*227
Cawthorne, L.	Frank	*46
Churchill, J.	Frank	**45
Chestnut, C.	Blairmore	*28
Cowan, W.	Bankhead	**4
Cooke, J.	Bankhead	*4
Catchpole, C.	Three Hills	*2
Clarke, J. C.	Blairmore	*33
Cole, J. J.	Bankhead	*66
Clyne, J.	Canmore	*65
Chestnut, C.	Blairmore	*28
Campbell, Kenneth S.	Edmonton	*102
Clemenson, Jno.	Bankhead	*105
Carson, James	Frank	*120
Crockett, Levi. Al.	Hillcrest	*131
Coupland, Geo.	Bellevue	*148
Carson, Geo.	Frank	*154
Crawford, Geo.	Frank	*160
Coombes, Walter P.	Taber	*164
Coupland, Edward	Lundbreck	*173
Charlton, Samuel	Hillcrest	*179
Cox, Jno.	Coleman	*193
Crawford, Jno.	Beaver Mines	*197
Coutts, Geo.	Lethbridge	*210
Clark, Robt.	Lethbridge	*212
Cranston, Michael	Clover Bar	*218
Davies, T.	Frank	**49
Duggan, R. G.	Taber	**27
Dowans, T.	Canmore	**24
Davies, W. J.	(Deceased)	**16

CERTIFICATES Issued by Government of the Northwest Territories and
by the Government of the Province of Alberta.—*Continued.*

NAME	ADDRESS	NO. OF CERT.
Dixon, S.	Lille	*18
Duggan, E. J.	Taber	*41
Devonshire, G.	Canmore	*31
Downs, T.	Canmore	*46
Davies, Thos. O.	Coleman	*109
Davidson, David	Edmonton	*170
Doodson, Robt.	Coal Creek, B.C.	*177
Duthie, Alex. F.	Pocahontas	*184
Digman, John H.	Royal View	*198
Duncan, Ninian S.	Cochrane	*211
Draper, Robt.	Cochrane	*214
Eccleston, W.	Michel, B.C.	*20
Evans, H.	Taber	*94
Evans, D.	Frank	*83
Evans, Hugh	Lethbridge	*156
Fairhurst, H.	Lethbridge	**39
Ferguson, C. J.	Canmore	*4
Fraser, J.	Coleman	*8
Fox, A.	Taber	*55
Fowers, C. W.	Canmore	*50
Fiske, G. E.	Edmonton	*88
Fisher, Samuel	Passburg	*169
Ford, Allan	Burmis	*183
Giffen, H. R.	Coalfields	*19
Gates, H.	Coleman	*26
Griffiths, E. H.	Canmore	*33
Gladwin, J.	Edmonton	*97
Gettiss, R.	Long Coulee	*85
Griffiths, T. J.	Lille	*77
Gillespie, Jno. M.	Coleman	*111
Gilliland, Wm.	Strathcona	*123
Gwilliam, David J. M.	Hillcrest	*130
Gregory, Jno. D.	Passburg	*128
Garrett, Jno.	Lille	*147
Griffiths, Jno. Thos.	Lille	*168
Garbett, Richard	Michel, B.C.	*180
Gorton, James	Hillcrest	*203
Holmes, G. E.	Fernie, B.C.	*15
Hood, Andrew	Frank	*20
Hadfield, Jno.	Canmore	*23
Harrison, Thos.	Bankhead	*29
Haines, Thos.	Coleman	*37
Harries, Henry C.	Coleman	*209
Harvie, Robt.	Lethbridge	*40
Hallworth, Albert	Bellevue	*52
Hayes, Robt.	Lundbreck	*60
Harvie, Jno.	Taber	*68
Henderson, W.	Minott	*61
Haggans, Alfred	Bankhead	*25
Humble, Stephen T.	Bellevue	*29
Hamilton, Chas.	Edmonton	*36
Hilling, James	Coleman	*43
Hannen, James	Canmore	*1
Holden, James	Bankhead	*13
Hadfield, Jno.	Coleman	*21
Hutton, Isaac	Bellevue	*99
Hartley, Wm.	Bankhead	*110
Hill, James	Royal View	*114
Hulme, Chas.	Hillcrest	*124
Henderson, James	Reid Hill	*134

CERTIFICATES Issued by Government of the Northwest Territories and
by the Government of the Province of Alberta.—*Continued.*

NAME	ADDRESS	NO. OF CERT.
Hutton, Jno.	Bellevue	*135
Henderson, Samuel	Reid Hill	*136
Halliday, Geo.	Champion	*155
Hughes, Wm. R.	Lille	*181
Hutton, Geo.	Bellevue	*186
Hutchison, Peter	Frank	*202
Heap, Robert	Lundbreck	*206
Hunter, Alex. B.	Coleman	*207
Ironmonger, Jno.	Hillcrest	*145
Jones, Evan	Coalfields	*12
James, Jos.	Frank	**25
Jones, Samuel A.	Lethbridge	*17
Jones, Erskine	Coalfields	**47
James, Henry	Coleman	*53
Jones, David	Edmonton	*69
Jones, Jack	Cardiff	*127
Jones, Peter	Lethbridge	*195
Jordon, Wm.	Taber	*220
Joyce, Michael	Bickerdike	*224
Kerr, Wm. R.	Coleman	*89
Kirkeberg, Henry S.	Michel, B.C.	*87
Kerr, Robt.	Lundbreck	*76
Kerr, Robt. T.	Passburg	*75
Kaye, Herschel	Maycroft	*191
Kemp, David	Beaver Mines	*201
Livingstone, Robt.	Lethbridge	*7
Livingstone, Jno. C.	Lethbridge	*18
Learmouth, A. J.	Lundbreck	*42
Love, Wm.	Edmonton	*86
Lamont, David	Frank	*98
Letcher, Jno. J.	Hillcrest	*149
Leblanc, Emile	Coleman	*153
Littler, Robt.	Michel, B.C.	*156
Loxton, Geo.	Fernie, B.C.	*176
Littler, Jno.	Bankhead	*190
Little, Matthew	Michel, B.C.	*226
Musgrove, Wm.	Canmore	*9
Mattson, Mat.	Frank	**34
Morris, David	Edmonton	*45
Machin, J. C.	Strathcona	*46
Moore, Thos. E.	Eyremore	*56
Mather, Thos.	Taber	*96
Morgan, Owen	Coleman	*143
Munro, Wm. K.	Lille	*150
Muir, David	Lundbreck	*151
Miller, Walter	Bellevue	*159
Moore, James H.	Coleman	*167
Massey, Harry	Michel, B.C.	*172
Murray, Jno.	Lille	*174
Mason, Samuel	Taber	*187
Morrison, Malcom	Coleman	*189
Melling, Peter	Coalhurst	*208
Mackie, Jno.	Corbin, B.C.	*221
McKay, Jno. Jas.	Lethbridge	*5
McKinnon, H. G.	Canmore	**36
McGregor, Alex.	Frank	*41
McCulloch, Alex.	Lille	*43
McDonald, J. A.	Blairmore	*44
McVey, Wm.	Frank	*39
McLeary, Stewart	Lethbridge	*58

CERTIFICATES Issued by Government of the Northwest Territories and
by the Government of the Province of Alberta.—*Continued.*

NAME	ADDRESS	NO. OF CERT.
McMillan, Wm. D.	Lethbridge	*72
McKinnan, Al. J.	Canmore	*62
McGarry, Martin	Michel, B.C.	*59
McLenhan, Jno. A.	Strathcona	*51
McDonald, Jas. A.	Lille	*91
McMillan, Jno.	Coleman	*107
McDonald, Duncan	Canmore	*112
McDonald, Hector	Blairmore	*115
McDonald, Wm. C.	Lethbridge	*122
McDevitt, James J.	Tofield	*129
McGladrie, Jno.	Lille	*152
McMullin, Jos.	Hillcrest	*171
McGeough, Jos. P.	Bellevue	*219
McDonald, James Ottis C.	Coleman	*225
Nelson, Horatio	Lundbreck	*11
Nanson, Thos. H.	Canmore	*15
Nicol, James	Frank	*34
Oliphant, J. H.	Frank	*26
Oliphant, Jno.	Bellevue	*79
O'Donnell, Thos.	Kipp	*139
Phillips, Chas.	Frank (Deceased)	**14
Prentiss, Jno.	Lille	*67
Powell, Albert	Clover Bar	*71
Pickering, Gabe	Taber	*194
Parker, Levi	Bellevue	*100
Pounder, Geo.	Pincher Creek	*84
Picton, Wm.	Frank	*78
Pickering, Gabe	Taber	*104
Parry, Thos.	Hillcrest	*119
Park, Stewart G.	Lethbridge	*121
Patterson, Jno.	Hillcrest	*126
Picton, Daniel	Passburg	*178
Park, Wm.	Lethbridge	*194
Quigley, Daniel H.	Lethbridge	*157
Queen, Andrew M.	Lethbridge	*228
Rice, Awrey	Frank	**48
Rawson, Thos. S.	Frank	*1
Rose, Walter	Lundbreck	*54
Roberts, Wm.	Strathcona	*95
Robinson, Jno. H.	Hillcrest	*106
Robotham, Wm. D.	Royal View	*116
Roberts, Ebeneza	Passburg	*118
Richardson, Alfred	Lethbridge	*125
Richards, Geo.	Coleman	*137
Roberts, Jno.	Nelson, B.C.	*140
Reid, James	Taber	*158
Richards, Evan	Cardiff	*162
Richards, Samuel	Corbin, B.C.	*175
Rawlinson, Roland	Burmis	*182
Rayner, Frederick	Frank	*188
Radford, James	Bellevue	*200
Scott, Robert	Lethbridge	*6
Scott, Hugh	Lethbridge	*8
Sedlock, Jos.	Canmore	*22
Smith, Robt.	Canmore	*32
Smith, Hugh	Canmore	*35
Stott, Jno.	Lethbridge	*38
Spencer, W. J.	Bankhead	**51
Salmond, James M.	Bankhead	*6
Sparrow, Edwin	Frank	*2
Smith, Ralph	Canmore	*8

**CERTIFICATES Issued by Government of the Northwest Territories and
by the Government of the Province of Alberta.—Continued.**

NAME	ADDRESS	NO. OF CERT.
Singleton, Robt.	Lundbreck	*47
Schmidt, O. P.	Edmonton	*44
Scott, Andrew N.	Edmonton	*28
Sihvon, Wm.	Bellevue	*27
Smith, A. J. P.	Bellevue	*103
Shaw, Thos. Jno.	Canmore	*113
Scott, Alex.	Pocahontas	*185
Sherratt, Owen (Sr.)	Coleman	*199
Smith, Thos.	Hillcrest	*216
Stobbs, Jos.	Diamond City	*217
Taylor, Wm.	Lethbridge	**10
Turner, Samuel H.	Frank	**21
Thomas, David	Bankhead (Deceased)	**31
Teppo, Herman	Bellevue	*19
Thompson, Thos.	Lundbreck	*16
Tonge, Thos.	Lundbreck	*5
Taylor, Thos.	Lundbreck	*30
Thomas, John J.	Frank	*74
Turner, Samuel H.	Frank	†22
Thompson, Thos.	Coleman	*93
Thomas, Jos. D.	Frank	*81
Thomson, Thos. Wilson	Bankhead	*161
Thompson, Jos.	Coleman	*165
Thomas, Isaac	Coleman	*204
Tully, Thomas	Fernie, B.C.	*215
Vola, Serafino	Canmore	*63
Watkins, W. Ed.	Canmore	*1
Wilson, Jno.	Canmore	*2
Watkins, Jno. W.	Canmore	*3
Waite, Archibald	Taber	**11
Webb, Jas. F.	Canmore	**42
Watters, Jno.	Bankhead	†5
Wilson, Wm. Geo.	Coleman	†3
Wright, Jno. S.	Canmore	*12
Welsh, Wm.	Lundbreck	*9
Willmott, Wm.	Canmore	*38
Wrigley, Walter	Frank	*37
Weston, Thos.	Strathcona	*73
Watters, A. G.	Bankhead	*49
White, Harry	Frank	*90
Williams, Walter Ed.	Clover Bar	*213
Williams, Jno. Jenkyn	†ickerdike	*223
Young, Thos.	Taber	*57
Young, Samuel	Cardiff	*101

* Certificates issued by the Government of the Province of Alberta under The Coal Mines Act.

** Certificates issued by the Government of the North-West Territories under The Coal Mines Regulation Ordinance.

† Certificates issued by the Government of the Province of Alberta under The Coal Mines Regulation Ordinance.

‡ Certificates issued by the Government of the North-West Territories and by the Government of the Province of Alberta, being duplicate certificates.

EDMONTON, January 31st, 1912.

JOHN STOCKS, ESQ.,

Deputy Minister of Public Works,

Edmonton, Alta.

SIR,—I have the honour to submit the following report for the year ending December 31st, 1912.

The total amount of coal produced in the province during the year was 3,446,349 short tons, which is an increase of 1,751,785 tons over 1911, and an increase of 409,592 tons over 1910. The large increase over the year 1911 is explained by the fact that during that year work in the larger mines in the southern part of the province was suspended for a period of practically eight months owing to a strike of the employees.

During the year 1912 work has been carried on steadily at all the mines, with the exception of several where local strikes occurred, which, however, only lasted a few days.

In the Crow's Nest Pass district all shot-firing is done by means of electric batteries and only explosives which are on the British permitted list are allowed to be used. It will be noted that there is a considerable decrease in the amount of powder used per ton of coal mined as compared with that used during previous years. Two fatal accidents occurred in the mines operated by the Canmore Coal Co., Ltd., near Canmore, due to the use of "Samsonite." Owing to the high temperature (52 degrees F.) at which "Samsonite" freezes, great precautions have to be taken when using it, especially during the winter months. It would appear that both of these accidents were caused by the use of this explosive while in a frozen state. I have taken this matter up with the manufacturers of explosives and I am informed that they hope to be able to manufacture an explosive which can be handled with a greater degree of safety.

In the Lethbridge district a number of mines have been commenced and several modern plants installed.

In the Calgary district a considerable amount of prospecting has been carried on and it is expected that several mines will be opened up during the present year.

A large amount of development work is being carried on in the district tributary to the Grand Trunk Pacific and Canadian Northern Railways west of Edmonton. The steel has been laid to several mines and large outputs may be expected from these mines in the near future.

There have been twenty-one fatal accidents in the province during the year, five of which occurred above ground and sixteen below ground.

There are 3,215 lamps of the Wolfe pattern in use in the province. These lamps are all fitted with internal igniters and magnetic locks.

At the mines operated by the Canmore Coal Company near Canmore, 454 lamps of the Clanny type, and at the mines operated by the Canadian Coal Consolidated, Ltd., near Frank, 102 lamps of the Marsaut

type are in use. These lamps are gradually being replaced, however, by lamps of a more approved pattern.

In the lignite field 56.21 per cent. of the total output was mined by machinery. No coal cutting machinery is used in the bituminous or anthracite coal fields.

The following table shows the amount of coal mined in the different districts of the province during the year 1912.

District	Number of Persons Employed	Lignite	Bituminous	Anthracite
Crows Nest Pass	2261		1,500,594	
Pincher Creek	122		24,222	
Lethbridge	935	624,150		
Taber	430	124,795		
Bow Island	51	8,654		
Milk River	17	2,518		
Banff	906		256,896	178,589
Medicine Hat	147	35,223		
Aldersyde	49	11,888		
Carstairs	11		543	
Carbon	35	8,232		
Drumheller	115	14,581		
Three Hills	45	7,936		
Lacombe	87	12,076	2,000	
Wetaskiwin	154	48,126		
Edmonton	503	208,888		
St. Albert	60	8,479		
Tofield	83	37,241		
Cardiff	221	185,337		
Pembina	104	3,265		
Yellowhead Pass	191		28,415	
Jasper Park	134		113,701	
Total	6,661	1,341,389	1,926,371	178,589

CALGARY DISTRICT.

MR. ANDREW N. SCOTT, DISTRICT INSPECTOR OF MINES, CALGARY, ALTA.

During the past year a considerable amount of development and prospecting has been done throughout the Calgary district, particularly in the lignite field. Northeast of Calgary a number of mines have been opened up on the Canadian Northern Railway, and a seam of excellent lignite coal proved. Although these mines are not yet large producers, it is expected that the year 1913 will see a large production of coal from this district. In the district north of Calgary and tributary to the Grand Trunk Pacific Railway a number of small mines are being operated. The work done so far has been of a preliminary nature, but it is gratifying to note that seams of lignite coal of an excellent character have been proved, also that the thickness is such that profitable mining is assured.

In the district west of Carstairs, mining on a small scale has been carried on and a seam of coal of a semi-bituminous character about ten feet in thickness has been proved.

The following is a summary of the improvements which have been made at the more important mines throughout this district:

Bankhead Mines, Limited.

Authorized Capital: \$1,000,000.00.
 President: R. B. Angus.
 Directors: R. B. Angus, E. B. Osler, C. H. Hosmer, W. D. Mathews,
 Secretary: A. R. G. Heward.
 Treasurer: B. T. Coon.
 Head Office: Montreal, Que.
 Mine Office: Bankhead, Alta.
 General Superintendent: Lewis Stockett.
 Superintendent: F. W. Guernsey.
 Mine Manager: John Watters.
 Mining Engineer: R. Dougall.
 Master Mechanic: D. Smith.
 Pit Boss: T. Bastian.
 Fire Bosses: J. Littler, R. Littler, W. Spencer, T. Thompson, W. Hartley,
 J. Letcher and A. Barclay.

This company controls 7,000 acres of coal lands near Banff. During the year a Canadian Rand high stage air compressor, which is a duplicate of one already in operation, has been installed.

No. O seam was located near the outcrop on B level by means of a short cross measure tunnel, and a tramway built from the top of B incline to the mouth of this tunnel. Several seams have also been located along the outcrop on C level and gangways driven on these seams. An incline is being built from these gangways to B level and will be fitted up and operated in the same manner as the incline now working from B to A levels. The length of this incline is about 2,500 feet. On A level the old gangway in No. O seam is being cleaned up and retimbered and will act as the main haulage road for all the seams on this level.

The quantity of powder used in this mine has been considerably decreased and all shots are fired by means of electric batteries.

Canmore Coal Company, Limited.

Authorized Capital: \$50,000.00.
 President: James B. Neale.
 Directors: James B. Neale, S. Brinckerhoff Thorne, O. H. Ingram, F. E. Weyerhaeuser, Joseph D. Thorp.
 Secretary: Edmund M. Parker.
 Treasurer: S. B. Thorne.
 Head Office: Canmore, Alta.
 Mine Office: Canmore, Alta.
 General Manager: James J. Morris.
 Mine Manager: W. G. Flint.
 Mining Engineer: T. B. Williams.
 Master Mechanic: H. W. Evans.
 Pit Bosses: No. 1 Mine—Wm. Musgrove. No. 2 Mine—Wm. Shaw.
 Fire Bosses: No. 1 Mine—J. S. Wright, James Clyne, C. W. Fowers, A. J. McKinnon, D. McDonald, T. Harrison, H. G. McKinnon. No. 2 Mine—T. J. Shaw, S. Vola, A. Besso and M. Bovis.

During the past twelve months considerable attention has been given to the airways in No. 1 mine, which have all been enlarged.

A tunnel has been driven from No. 3 to No. 4 seams and another from the face of the gangway in No. 1 seam to the overlying seams on

the north dip for a return airway. A self-acting incline 550 ft. in length and pitching from ten to fifteen degrees has been driven from the face of the West Carey gangway along the trough between the two limbs of the anticline.

In No. 2 mine, No. 1 tunnel has been completed to the Sedlock seam and will form a main haulage road with a uniform grade for all coal taken from this seam.

No. 2 tunnel has been driven a distance of 350 ft. from bottom of the main slope and will cut all the underlying seams on the north dip.

An underground slope has also been driven a distance of 350 ft. along the trough between the north and south contours. This slope is double-tracked and a compressed air hoisting engine has been installed at the top of it.

A Leonard return tubular boiler 72 ins. by 18 ft. has been added to the surface equipment and an addition made to the washhouse, giving an additional eighty-four lockers and four shower baths. A low pressure air line four inches in diameter has been laid from No. 1 mine to the inside workings of No. 2 mine, a total distance of 7,500 ft.

Eight two-storey semi-detached frame houses have been built for the use of the employees.

A covered-in skating rink with an ice surface of 70 ft. by 150 ft. has been built by the company for the use of the employees.

Bonnie Brae Coal and Quarries, Limited.

Authorized Capital: \$250,000.00.

President: M. Janse.

Directors: M. Janse, J. Steinbrecker, F. N. S. Eaton, A. Phillips.

Head Office: No. 3 Mackle Block, Calgary, Alta.

Mine Office: Bonnie Brae Mine, Cochrane, Alta.

General Manager: Arthur Phillips.

During the past year very little work has been done, the mine at the present time being closed down. A slope has been sunk for a distance of 350 feet on the seam, which is dipping about 30 degrees. The seam varies in thickness from 4 ft. 6 ins. to 5 ft. 6 in. and has a clay roof.

Safety lamps of the Wolfe pattern were installed and Monobel powder used for blasting.

An office, bunkhouse and cookhouse have been built, also frame buildings for the hoist and boiler.

The Mitford (Calgary) Colliery, Limited, Mitford.

Authorized Capital: \$1,000,000.00.

President: R. B. Bennett.

Directors: R. B. Bennett, Clement H. Pollen, Noel E. Brooks.

Secretary: Alexander Hannah.

Head Office: Clarence Block, Calgary, Alta.

Mine Office: Mitford, Alta.

General Superintendent: F. H. Bell.
Pit Boss: John Russell.
Master Mechanic: W. Toward.

As less than twenty men are employed underground at this mine no certified manager has been appointed, the operations underground being under the charge of a man holding a provisional certificate.

During the past year development work has been carried on, and at present the main slope is down a distance of 900 feet. Two main gangways and counter gangways have been driven on the strike of the seam, 300 feet north and south respectively.

A modern plant and tippie is being erected to handle an output of 500 tons in eight hours.

A frame workshop and storehouse 50 ft. by 80 ft. have been erected on concrete foundations, the workshop being fitted with the necessary equipment, including a No. 2 Williams patent pipe cutter and threader, a 36 in. by 5 in. grindstone, emery wheel, drill press, blacksmith's forge with blower, all of which are belt-driven from a central shaft driven from a 5 h.p. electric motor.

The boiler house is 26 ft. by 58 ft. and has a concrete foundation. One Leonard boiler of 150 h.p. capacity and 125 lbs. steam pressure is installed and room has been left for an additional unit when required.

The power house is 15 ft. by 58 ft., which adjoins the boiler house, is equipped with a 10 in. by 10 in. Leonard engine of 40 h.p. capacity which drives by means of a belt a 42.5 k.w. electric generator. The current is to be used for power and lighting purposes.

The foundations for hoisting engine house are completed and work started on the building, which will be 22 ft. by 18 ft.

The hoisting engine, which is supplied by the Ottawa Iron Works, Iowa, U.S.A., is of the Litchfield make, first motion, 100 h.p., with 5 ft. drum.

A wash-house is being built adjoining the engine house, but will not be completed for some time yet; it is 20 ft. by 30 ft. and fitted with shower baths and lockers.

The tippie, which is to be fitted with shaker screens and picking tables, will not be completed for some time yet. Foundations are now being built for the tippie.

Five cottages 26 ft. square have been completed for the use of the employees.

Prairie Coal Company, Limited, Eyremore.

Authorized Capital: \$1,000,000.00.
President: George F. Wilson.
Directors: George F. Wilson, James Balfour, B. C. Moore, C. R. Henderson, John King, William P. Boshart, J. C. Woods.
Secretary: B. C. Moore.
Treasurer: B. C. Moore.
Head Office: Room 3, Princess Block, Regina, Sask.
Mine Office: Eyremore, Alta.
General Manager: C. R. Henderson.
Pit Boss: T. E. Moore.

During the past year very little development work has been done at this mine which only supplies local trade at present. It was hoped that railway connections would be obtained during the year 1912, but so far nothing has been done in this connection.

Rosedale Coal and Clay Products Company, Limited, Drumheller.

Authorized Capital: \$1,500,000.00.
President: W. Georgeson.
Directors: W. Georgeson, G. R. Pirrie, H. H. Moore, W. Carson, Mrs. C. Stirret, J. F. Moodie.
Secretary: Alexander Hannah, lawyer, Calgary.
Treasurer: W. Carson.
Head Office: Calgary, Alta.
Mine Office: Drumheller, Alta.
General Manager: W. Georgeson.
Mining Engineer: K. Moodie.
Superintendent: J. F. Moodie.

This company controls 13,908 acres of coal lands in the Drumheller district. Two seams of coal have been proved and a little development work done. The top seam is about 4 ft. in thickness and the lower ft. in thickness. The coal is of an excellent quality and is lying practically level.

Plans are being prepared for the construction of a bridge across the Red Deer River for the purpose of giving railway facilities.

A shaft 12 ft. by 12 ft. by 40 ft. deep has been sunk to the lower seam and a pair of entries driven a short distance.

A small tippie has been erected and a 25 h.p. hoist installed as a temporary equipment, a modern plant being designed for the near future.

Temporary bunkhouse, cookhouse and washhouse have also been built.

The Rose Deer Coal Mining Company, Limited, Drumheller.

Authorized Capital: \$1,000,000.00.
President: R. F. De Mere Lemon.
Directors: R. F. De Mere Lemon, J. Arnell, J. R. Macdonald, V. Raby, F. W. Sheppard and G. V. Tupper.
Secretary: J. R. Neil.
Treasurer: J. R. Macdonald.
Head Office: 13 Lineham Block, Calgary.
Mine Office: Drumheller, Alta.
General Manager: R. F. De Mere Lemon.

This company controls 6,069 acres of coal lands in the Drumheller district, situated on the Canadian Northern Railway. A considerable amount of prospect work has been done on this property during the past year, and a number of entries driven for a short distance in the top seam which outcrops on the banks of the Red Deer River and Rosebud Creek. The lower seam, which is about 30 feet below the river, has been opened by means of a short slope and an entry driven for a distance of 300 ft.

The lower seam, which is 6 ft. thick and the top seam, which is 4 ft. thick, are both of a high grade lignite coal.

A chute has been built from the mouth of one of the entries in the upper seam for dumping the coal to a small temporary tipple. A spur line, 3,000 feet in length, has been built from the main line to the tipple.

Plans are now being prepared for the erection of a modern plant in the near future.

Drumheller Coal Company, Limited, Drumheller.

Authorized Capital: \$500,000.00.
President: Samuel Drumheller.
Directors: J. L. Drumheller, P. C. Shine, D. M. Drumheller, A. Coolidge, J. Findlay.
Secretary-Treasurer: J. L. Drumheller.
Head Office: _____.
Mine Office: Drumheller, Alta.
Mine Manager: N. Howells.

This company controls 1,540 acres of coal lands near Drumheller, situated on the Canadian Northern Railway and have the same two seams that are characteristic of this district.

A slope of 8 ft. by 7 ft. on a 25 degree pitch has been sunk for a distance of 250 feet to the lower seam, which is about 5 feet thick.

A 20 h.p. boiler, hoist and temporary tipple have been installed and a connection made with the main line by means of a spur track.

Midland Collieries, Limited, Drumheller.

Authorized Capital: \$300,000.00.
President: T. G. McMullon.
Directors: A. R. Gould, W. G. Fraser, T. G. McMullon.
Secretary-Treasurer: James McMurray.
Head Office: Truro, N.S.
Mine Office: Drumheller, Alta.
General Manager: S. L. McMullon.
Superintendent: Henry McCarther.

This company controls 1,400 acres of coal lands adjoining the Canadian Northern Railway in the Drumheller district.

A slope 200 feet in length has been sunk to the lower seam, which is 5 feet thick, but no further work has been done on the property. Work was started late in the year and a plant and tipple to handle about 400 tons per day is being built.

Temporary shops, boarding house and office buildings have been erected.

Newcastle Coal Company, Limited, Drumheller.

Authorized Capital: \$250,000.00.
President: J. Gouge.
Directors: J. Gouge, G. M. Coyle, M. Gouge.
Secretary-Treasurer: C. M. Coyle.
Head Office: Drumheller, Alta.
Mine Office: Drumheller, Alta.
General Manager: J. Gouge.
Mine Manager: S. D. Wark.

The property controlled by this company consists of 1,000 acres, situated on the Canadian Northern Railway near Drumheller. Two seams of coal have been proved and the lower seam opened up by a pair of entries driven a distance of 800 feet. A tippie to handle about 200 tons per day has been erected along with engine house, boiler house, office and cookhouse.

A 35 h.p. boiler and a 25 h.p. hoist have been installed and a spur track about 500 feet in length built from the main line.

The seam, which is lying almost level, is about 5 feet thick and of good quality.

Vulcan Coal Company, Limited, Drumheller.

Authorized Capital: \$500,000.00.

President: A. Judson Sayer.

Directors: James W. Davidson, A. J. Sayer, E. R. Mosher.

Secretary-Treasurer: E. R. Mosher.

Head Office: Calgary, Alta.

General Manager: James W. Davidson.

This company holds 2,680 acres of coal lands in the Drumheller district, about two miles from the Canadian Northern Railway. Very little work has been done on the property, several small openings having been made to the two seams on the property, but at present all work has been stopped. The seams are reported to be 3 ft. and 4 ft thick respectively.

A spur track about one mile in length has been built from the main line.

Calgary Collieries, Limited, Ardley.

Authorized Capital: \$300,000.00.

President: Col. James A. Walker.

Directors: James Walker, John Gillespie, Dr. W. Egbert, E. B. Williams, W. H. Gilmore, William Gillespie, D. G. Lamont.

Secretary-Treasurer: E. G. Lamont.

Head Office: 814 First Street West, Calgary, Alta.

Mine Office: Ardley, Alta.

General Manager: Col. James A. Walker.

Superintendent: H. F. Breckenridge.

Fire Boss: Robert Hayes.

This company holds 2,440 acres of coal lands adjoining the Grand Trunk Pacific Railway near Ardley. The seam, which is about 6 feet in thickness, outcrops on the bank of the Red Deer River, and has been opened by two pairs of entries driven a distance of 200 feet.

A small hoist and boiler, built by the American Hoist and Derrick Company, has been installed and a spur track with three branches has been built from the main line to the plant. The tippie can handle about 200 tons in eight hours and is equipped with bar screens and weigh scales.

Cookhouse, bunkhouse, boiler-house, office and several dwelling houses have been erected.

The Coalbeck Coal and Clay Products, Limited, Coalbeck.

Authorized Capital: \$300,000.00.

President: Carl Stettler.

Directors: Carl Stettler, O. F. Hough, C. S. Maharg, E. Reamer.

Secretary-Treasurer: G. Anxur.

Head Office and Mine Office: Coalbeck.

General Manager: T. V. Hough.

Mining Engineer: T. B. Stephens.

Mine Manager: G. Cunningham.

Master Mechanic: A. Halsith.

This company controls 2,660 acres of coal lands near Coalbeck on the Canadian Pacific Railway.

The seam runs from 6 feet to 10 feet in thickness with about 10 feet to 50 feet of cover and has been opened by means of ten entries. A tipple has been erected to handle an output of 400 tons per day. Two 25 h.p. hoisting engines and boilers have also been installed.

Shops, office, boarding house, wash-house and eight dwelling houses have been built.

Redcliff Brick and Coal Company, Limited, Redcliff.

Authorized Capital: \$350,000.00.

General Manager: E. H. Sellhorn.

Mine Manager: R. Hamilton.

During the past year this company has considerably improved the plant and increased the output. Electric lights have been installed along the main roads of the mine and a telephone connecting the office to the underground workings.

A bed of shale about 50 feet below the surface and about 20 feet thick is being used for brick-making purposes. The seam has been opened up on the pillar and stall system and 16 feet of it is extracted in the first operation. Electric lights have also been installed in every place throughout the shale mine. Two-ton steel side dump cars have been adopted.

A shale mine is also being operated near Redcliff by the Redcliff Clay Products Company, Limited, who have sunk a slope and are now producing about 60 tons of shale per day for brick-making purposes.

Several other coal mines are operating on a small scale in the Medicine Hat district and are supplying local trade only. These mines employ only a few men during the winter months. Another mine is also operating south of Suffield.

Several mines in the Brooks district are operating for the purpose of supplying the local demand. Only a few men are working at each of these places which are all practically closed during the summer months.

In the Three Hills district there are four mines operating, each producing from 5 to 15 tons per day during the winter months.

In the Ghost Pine Creek there are also two small mines producing from 2 to 5 tons per day each.

In the Carbon district there are four small mines working, each producing from 5 to 25 tons per day.

One other mine is working near Drumheller, but is only producing a small output.

Several small mines are also being operated near Standard and Rosebud.

Near Munson on the Canadian Northern Railway, a property of 1,280 acres is being developed by the Munson Collieries, Limited, who have driven two entries from the river banks and are building a spur track from the main line.

In the Hand Hills district a mine has been opened on a 6 ft. seam and is producing coal for local trade only.

In the Trochu district there are seven small mines working a seam of coal about 5 ft 6 ins. in thickness.

Several of these mines are only a short distance from the Grand Trunk Pacific Railway and expect to have railway connections within the next few months.

In the Champion and Carmangay districts there are 10 mines working a seam of coal about 3 ft. in thickness. The output from these mines is sold entirely for supplying local demand.

About 30 mines are in the neighbourhood of the Lacombe Branch of the Canadian Pacific Railway for the purpose of supplying local trade.

About 40 miles west of Carstairs a property owned by Mr. Knowlton, of Vancouver, is being prospected. Three seams of coal pitching about 40 degrees have been proved. The output from these prospects supply local demand only.

In the district west of High River, Okotoks and DeWinton, there are six mines working a vertical seam of coal about 6 ft. in thickness.

A considerable amount of prospecting work has also been done in the Brazeau district by the Brazeau Collieries, Limited, but practically no development work will be done in this district until the steel is laid to the mines.

CROW'S NEST PASS DISTRICT.

FRANCIS ASPINALL, DISTRICT INSPECTOR OF MINES, LETHBRIDGE.

McGillivray Creek Coal and Coke Company, Limited.

Authorized Capital: \$3,000,000.00.

President: L. A. Campbell.

Vice-President: J. A. Nowell.

Directors: L. A. Campbell, J. A. Nowell, I. M. Paine, Fitzhugh Burns, and W. E. Cullen.

Secretary-Treasurer: W. E. Cullen, Jr.

Managing Director: L. A. Campbell.

Assistant to the President: R. McKibbin.
 President's Office: Rossland, B.C.
 Head Office: Spokane, Wash., U.S.A.
 General Offices and Mine Office: Coleman, Alta.
 Mine Manager: Geo. Kellock.
 Pit Boss: Peter Allen.
 Master Mechanic: T. D. Stockdale.

This property is located at Carbondale, about one mile west of the town of Coleman, the seams being a continuation of the Coleman series.

During the past year a large amount of development work has been carried on. The entries to the north are now in a distance of 4,000 feet from the bottom of the slope. The method of work adopted is a modification of the panel system. Rooms 10 feet wide are driven up the pitch in series of ten, and a barrier pillar left until the pillars are extracted.

During the past year a new wash-house has been erected, also one four-drill air compressor, one 10-ton electric locomotive which is used to haul the coal from the mine entrance to the tippie, and twenty steel mine cars equipped with brakes and having a capacity of four and a half tons.

The International Coal and Coke Company, Limited.

Authorized Capital: \$3,000,000.00.
 President: A. C. Flumerfelt.
 Vice-President: H. Davidson.
 Directors: A. C. Flumerfelt, H. Davidson, R. W. Riddell, W. G. Graves,
 H. H. Kizer, Frank H. Graves.
 Secretary: W. G. Graves.
 Treasurer: John McKeagan.
 Managing Director: R. W. Riddell.
 General Manager: O. E. S. Whiteside.
 Head Office: Spokane, Wash., U.S.A.
 Mine Office: Coleman, Alta.
 Mine Manager: W. A. Davidson.
 Pit Bosses: David Davies, William Watson, John Davies.
 Engineer: D. A. Macaulay.
 Master Mechanic: James Scott.

Two seams are being operated, viz.: Numbers 2 and 4. The entries in number 2 seam have been driven a distance of 1,605 feet, number 4 seam a distance of 1,607 feet, and in number 2 seam, York Creek, a distance of 1,350 feet during the past year. The total distance from the mine entrance to the face of the entry in No. 2 seam is 13,000 feet. A rock tunnel, 250 feet in length, has been driven connecting numbers 2 and 4 seams. A slope has been sunk in No. 4 seam for a distance of 652 feet to allow for the development of a lower lift of coal.

During the past year the following plant has been installed at York Creek:

One 16 in. by 28 in. by 24 in. steam, 18 in. by 10½ in. by 9 in. by 5 in. high pressure air compressor, manufactured by the Canadian Rand Company. Two 72 in. by 18 ft. return tubular boilers, one boiler house 28 ft. by 44 ft., one powerhouse 20 ft. by 42 ft., one feed water heater and one 9 in. by 5¼ in. by 10 in. Worthington duplex feed pump. A wash-house and timekeeper's office have also been erected.

One 12 in. by 7 in. by 10 in. duplex ram-pattern feed pump, one 18 in by 30 in. lap lathe 12 ft. bed, one vertical drill, one 7-ton larry, and one circular ripping saw and carriage have also been added to the plant.

The North Kootenay Pass Collieries, Limited.

Head Office: Spokane, Wash., U.S.A.

Mine Office: Situated at the mine on Sec. 29, Tp. 7, Rge. 4, W. 5.

This mine is situated about three miles south of Coleman, but at present has no railroad facilities.

A slope is in the course of being sunk from the surface to the coal through gumbo, and is now down a distance of 175 ft.

The West Canadian Collieries, Limited.

Authorized Capital: \$720,000.00.

President: Alphonse Wicart.

Directors: Alphonse Wicart (chairman), John Robert Tennant, Arthur Anthony Beauman, Francois Lefevre, Edmond Ory, Edouard Decoster, Baron Rene' de la Grange O'Tard, Edouard Carlier, Jean Cavois; and H. Maitland Kersey.

Secretary: Andre Ghesquier.

General Manager: J. Menard.

Head Office: Lille, France.

Mine Office: Blairmore, Alta.

Blairmore Mine.

Mine Manager: W. P. Williams.

Fire Bosses: E. Leblanc, Wm. McVey, S. Mason, E. Morgan, D. Davidson, and K. S. Campbell.

Formerly this mine was worked across the pitch, places being driven on a 30 degree angle. This method of work has now been discontinued and a system of working rooms parallel to the strike of the seam instituted in its place, which is giving excellent results.

During the year No. 1 entry has been driven 957 ft. and No. 2 entry a distance of 832 ft.

One hundred and fifty feet of trestle has been built, and a new saw-mill erected.

Bellevue Mine.

Mine Manager: S. Shone.

Pit Bosses: Ed. Bridge and W. J. Pearson.

Fire Bosses: J. Hutton, J. McGeough, T. Tonge, H. Blake, J. McDonald, J. Radford, E. Coupland, J. Roberts, W. Miller, H. Smith.

A large amount of development has been done on this property during the past year.

A new rock tunnel has been driven at right angles to No. 61 rock tunnel, which proves the east leaf of the anticline. The coal at this

point is about 18 feet thick. A raise is now being driven to the surface to provide better ventilation, after which the seam will be opened up as soon as possible.

At chute No. 125 a rock tunnel is in the course of being driven through the anticline to the surface to provide another outlet.

Telephones have been installed throughout No. 1 mine, and electric light along the main entry of No. 2 mine.

Chute No. 44 has been graded and is now used to dump the coal from No. 2 mine to No. 1 mine, from where it is hauled outside to the tippie by means of compressed air locomotives.

Lille Mine.

This mine is situated about six miles north of the town of Frank, and is connected to the Canadian Pacific Railway by a spur track.

Practically no development was done during the past year, this mine being closed down during the last four months. The only work done during the latter part of the year was the loading of some 10,000 tons of coke that were in stock.

The Canadian Coal Consolidated, Limited.

Authorized Capital: \$2,000,000.00.

President: Maurice Tilloy.

Vice-President: Henri Buchett.

Directors: Fernand Leconte, Le General Ad Avon, Jean St. Cirons, Georges Cahen, Comte Jacques d'Arlincourt, Leon Motte, Jacques Bernard.

Secretary: P. Buisson.

Managing Director: Felix Colomer.

Technical Manager: A. Rotteleur.

Business Manager: C. J. Tompkins.

Head Office: 113 Rue Reaumur, Paris, France.

Mine Office: Frank Alta.

Mine Manager: James Finalyson.

Pit Bosses: Thomas Davis and James Nicol.

This company is operating two mines, viz. the old mine and the shaft mine. These mines are probably working the same seam of coal.

In the old mine during the year another slope was sunk on a 30 degree pitch for a distance of 390 ft. a short distance to the south of the bottom of the old slope, which gives an increased lift of 200 ft., making altogether a lift of about 500 ft. The entries in this seam which are 7 ft. by 8 ft. have been driven a distance of 2,800 ft. during the year. The seam, which is pitching at an inclination of about 70 degrees, is 13 ft. in thickness. The method of working is the angle system, rooms being driven 6 ft. by 8 ft. at 30 ft. centre across the pitch at an inclination of 35 degrees with cross-cuts every 40 ft. for the purpose of ventilation.

A Cameron pump with a capacity of 50 gallons per minute, driven by compressed air, has been installed at the bottom of the new slope,

to pump the water to the turbines, which are situated at the bottom of the old slope, where one four stage Worthington turbine electrically driven by 100 h.p. motor has been added.

The shaft mine, which is situated a short distance northwest of the old mine, is also worked on the angle system, angles being driven on a 35 degree pitch with cross-cuts every 30 ft. to provide for ventilation. At a distance of about 100 ft. south of the bottom of the shaft a 30 degree slope has been sunk for a distance of 507 ft. to provide a greater lift, and entries driven north and south for a distance of 200 ft. A pump has been installed at the bottom of this slope to pump the water to the bottom of the shaft. A hoist has also been erected at the top of the slope. The entries to the north of the bottom of the shaft have been driven 1,650 ft. during the year. One 500 ft. Rand straight line air compressor has been installed, also one condenser and induced draft and chain grates for the boilers.

About half a mile north of the shaft mine a new shaft has been sunk to a depth of 20 ft. This shaft is circular and will be 18 ft. in diameter inside the brickwork when completed. It is intended to sink this shaft to a depth of 1,000 ft. A double drum hoist has been installed for sinking and a temporary derrick erected, preparations being made to instal boilers.

Hillcrest Collieries, Limited.

Authorized Capital: \$3,000,000.00.

President: C. B. Gordon.

Directors: C. B. Gordon, C. Meredith, H. S. Holts, W. D. Matthews, H. P. David, J. S. C. Fraser, C. R. Hamilton, J. M. Mackie, G. H. Duggan, C. P. Hill, John Brown.

Secretary: J. M. Mackie.

Head Office: Montreal, Que.

Mine Office: Hillcrest, Alta.

General Manager: John Brown.

Mine Manager: James S. Quigley.

Fire Bosses: Walter Rose, Wm. Adlam, Thos. Taylor, Dan Briscoe and S. Charlbon.

Considerable development has been done during the year. No. 1 slope has been sunk another 200 ft. and is now down a total distance of 1,400 ft. Entries are driven to the east from the bottom of this slope for a distance of 1,000 ft. and rooms driven up the pitch.

About 1,500 ft. west of No. 1 slope No. 2 slope has been sunk on an inclination of 24 degrees for a distance of 800 ft. and entries from the bottom driven west for a distance of 1,100 ft.

The following additions have been made to the plant during the past year:

One 312 k.w. A. C. generator and engine to supply power to operate the pumps at the bottom of slopes, also to supply light to the town of Hillcrest; one Sirocco fan electrically driven, capable of producing 150,000 cubic feet of air per minute against a 2 in. W. G., and one pair of direct connected engines for hoisting coal up No. 2 slope.

Maple Leaf Coal Company.

Authorized Capital: \$500,000.00.

President: D. M. Drumheller.

Vice-President: A. Coolidge.

Directors: C. P. Lund, M. Oppenheimer, A. Kuhn, D. M. Drumheller, A. Coolidge.

Secretary: C. P. Lund.

Treasurer: C. P. Lund.

General Manager: James Finlay.

Head Office: Spokane, Wash., U.S.A.

Mine Office: Bellevue, Alta.

Mine Manager: J. McCulloch.

Fire Bosses: M. McGarry and J. M. McGladrie.

A rock tunnel 7 ft. by 8 ft. has been driven on this property, which is situated near the Canadian Pacific Railway, proving No. 1 and No. 2 seams. These seams are probably a continuation of the Bellevue series.

One 150 h.p. return tubular boiler and a wash-house have been installed.

The Leitch Collieries, Limited.

Authorized Capital: \$1,000,000.00.

President: Malcolm Leitch.

Vice-President: G. O. Aulsebrook.

Directors: F. C. Baker, J. C. Drewry, A. W. Fraser, A. K. Leitch, J. D. McBride, W. A. McLeod, W. G. McMahon, and D. E. Williams.

Secretary-Treasurer: Edward Holroyde.

General Manager: W. L. Hamilton.

Head Office: Winnipeg, Man.

Mine Office: Passburg, Alta.

Manager: J. D. Thomas.

Fire Bosses: D. Picton and G. Richards.

Two mines, No. 1 south and No. 2 north, are being operated. No. 1 mine has been closed down temporarily owing to a fault being encountered in the main gangway which cuts across the higher workings.

No. 2 mine is situated about one mile north of the Canadian Pacific Railway and is connected to the tippie by a single rope haulage system 1,800 ft. long with an average grade of 4 per cent.

The main gangway has been driven in No. 2 seam for a distance of 3,600 ft. At two points on this gangway rock cross-cuts have been driven east and west, one of the tunnels to the west being driven through No. 1 seam to the outside, where a fan is installed which is capable of producing 1,000 cubic feet of air per minute against a 2 in. W. G. The other tunnel to the west was driven near the face of the gangway to prove No. 1 seam, which appears to be of an excellent quality at this point. The two rock tunnels to the east intersect Nos. 3, 4, 5, 6 and 7 seams. The haulage from a point about 2,000 ft. from the entrance to the mine is done by a Whitcombe four-cylinder gasoline locomotive. This locomotive was formerly used to haul the coal to the tippie also, but owing to the heavy grade it did not prove very successful.

All the seams opened in this mine are lying at an average inclination of about 60 degrees. The system of working used is the angle or diamond method driven on a 30 degree pitch. By this method there

is less breakage of coal and the coal can be cleaned in a more efficient manner.

One hundred ovens of the rectangular type and a washer of the Luhrig type fitted with ten jigs have been put in operation, one pusher and coke oven leveller, three return tubular boilers of 150 h.p. each, one 14 ft lathe, one gasoline locomotive, one 500 ft. straight line air-compressor, one coal crusher, 50 mine cars with a capacity of three tons each, 1,600 ft. of snowshed, new powerhouse, and excavation for new wash-house have been added to the equipment during the past year.

Davenport Coal Company, Limited.

Authorized Capital: \$500,000.00.

President: F. H. Mason.

Vice-President: W. Clayton Miller.

Directors: A. H. Mason, W. Clayton Miller, C. Hussey, J. A. Finch, Chas. P. Lund.

Secretary: C. Hussey.

General Manager: J. Dougall.

Head Office: Spokane, Wash., U.S.A.

Mine Office: Burmis, Alta.

Mine Manager: W. A. Barnes.

This mine is located at Burmis on the Crow's Nest Pass branch of the Canadian Pacific Railway.

The entries in No. 2 seam have been extended a distance of 1,500 feet, and the following additions made to the plant: Two 80 h.p. boilers of the locomotive type, one 14 in. by 28 in. steam engine connected to a D. C. generator for operating the fan, tippie, etc., one tippie equipped with Rotary dump and Marcus screen and conveyor 60 ft. in length, capable of handling 120 tons of coal per hour.

The Breckenridge & Lund Coal Company, Limited.

Authorized Capital: \$500,000.00.

President: Harold Darling.

Vice-President: J. H. Wellington.

Directors: Peter Lund, John Breckenridge, Chas. Albert Cock.

Secretary: H. F. Breckenridge.

General Manager: H. C. Lancaster.

Head Office: Lundbreck, Alta.

Mine Office: Lundbreck, Alta.

No additional plant has been installed nor other improvements made during the past year.

The Galbraith Coal Company, Limited.

Authorized Capital: \$250,000.00.

President: Andrew Laidlaw.

Vice-President: J. H. C. Willoughby.

Directors: Andrew Laidlaw, J. G. Short, Moses Oppenheimer, William Richardson, Dr. J. H. C. Willoughby.

Secretary: J. G. Short.

Treasurer: C. C. Moore.

Managing Director: J. C. Short.

General Manager: C. C. Moore.
 Business Manager: C. C. Moore.
 Head Office: Spokane, Wash., U.S.A.
 Mine Office: Lundbreck, Alta.

This mine has not been operated during the past year.

The Western Coal and Coke Company, Limited.

Authorized Capital: \$3,500,000.00.
 President: E. B. Greenshields.
 Directors: E. B. Greenshields, Hon. R. McKay, H. O. Levett, Chas. Fergie,
 J. W. McConnell and M. Curry.
 Secretary-Treasurer: Geo. V. Cousins.
 Head Office: Montreal, Que.
 Mine Office: Beaver Mines, Alta.
 General Manager: Chas. Fergie.
 General Superintendent: W. Maxwell.
 Mine Manager: Sam McVicar.
 Fire Bosses: D. McMillan, D. Muir and Thomas Davis.

This company is operating two mines southwest of Pincher Station on the Crow's Nest Pass branch of the Canadian Pacific Railway and is connected to this railway by a spur 14 miles in length.

Considerable development has been done during the past year. The main and counter-gangways have been extended a distance of 4,500 ft. from the mine entrance. At about 1,000 ft. from the mine entrance a slope is sunk on the pitch of the seam at an angle of 30 degrees for a distance of 1,208 ft. and entries driven to the north 1,080 ft. and to the south 1,040 ft.

Monobel is used and all shots are fired by means of electric batteries. Safety lamps of the Wolfe pattern only are used throughout the mine.

The following plant capable of handling 2,000 tons of coal per nine hours has been completed during the past year and the following buildings erected and machinery installed:

Two 200 h.p. Robb-Mumford boilers, 125 lb. pressure, two 100 h.p. Robb-Brady boilers, 125 lb. pressure with Hoppes feed water heater and a 6 in. by 12 in. Fairbanks-Morse feed pump. The boiler house has provision for other two 200 h.p. Robb-Mumford boilers, and is 72 ft. by 45 ft. by 18 ft. covered with steel shingles and steel siding; one 160 k.w a.c. three-phase 60 cycl. Allis-Chalmers Bullock generator driven by a compound 200 h.p. non-condensing vertical high speed (450 r.p.m.) Browet & Lindley engine; one 25 k.w d.c. excitor Allis-Chalmers Bullock direct, connected to an 8 in. by 10 in. Ideal Goldie & McCulloch engine; one 4-panel switchboard, one 600 cubic ft. capacity straight line Sullivan two-stage air compressor delivering air at 100 lb. pressure; one Walker fan, 75,000 cub. ft. capacity against 4 in. W. G., belt driven by a single cylinder Walker engine contained in a metal shingle covered house; one 15 by 24 Fraser-Chalmers hoist engine geared 4.6 to 1 7 ft. diameter drum. Powerhouse 43 ft. by 40 ft. by 14 ft., wooden building covered with metal shingles. A wash-house 22 ft. by 53 ft. by 11 ft., metal shingled roof, drop siding, containing 120 steel lockers, shower baths and a surgery built on the side, concrete floors throughout; a lamp-house 15 ft. by 33 ft. by 9 ft., brick, equipped for 400 safety lamps and

cleaning apparatus; a stable 62 ft. by 33 ft. by 10 ft. 6 ins., with stalls for twenty horses, which is a wooden building covered with steel shingles; a wooden building covered with metal shingles, 36 ft. by 20 ft. by 14 ft. with a capacity for two cars of hay and one car of oats, used for feed storage; a machine shop, 90 ft. by 28 ft., containing carpenter's shop, forge and machine shops, with brick walls between; machine shop containing lathe, pipe threader, emery grinder and drill press, forges and a 400-lb. steam hammer. All tools are driven from countershafting driven by a 30 h.p. motor; a two-storey wooden warehouse, 48 ft. by 24 ft. by 17 ft., covered with steel shingles; 65 frame dwelling houses of four and five rooms each; a screening plant electrically driven and lighted, two rotary dumps, two sets of fixed bar screens and Ottumwa box car loader; one locomotive and shed for same; waterworks—capacity 150 gallons per minute, one mile of 6 in. steel pipe, turbine pumps motor driven, water tank of 90,000 gallons capacity.

The Head Syndicate, Limited.

Authorized Capital: \$275,000.00.
 President: James Cameron Head.
 Directors: Harry Scott Barton, Charles M. Brereton.
 Secretary: Frank Tingle.
 Managing Director: Leslie Hill.
 Head Office: 110 Cannon Street, London, Eng.
 Mine Office: Vernon, B.C.
 Pit Boss: W. Rowe.

This company controls 7,500 acres of property situated on Lynx Creek in the south fork, about 12 miles south of the town of Blairmore.

The only development done during the past year was a tunnel which was driven for a distance of 700 feet across the measures to intersect the various seams.

The Carbon Hill Coal and Coke Company.

Authorized Capital: \$2,000,000.00 Common; \$500,000.00 Preferred.
 President: H. W. Wright.
 Directors: H. W. Wright, F. B. Morrill, F. B. Gregg, Wm. Watson, F. H. Sammis.
 Secretary: F. B. Morrill.
 General Manager: F. O. Adams.
 Head Office: Spokane, Wash., U.S.A.

This company controls 2,500 acres of coal on the South Fork.

The only work done during the year consists of prospecting, as there are at present no railroad facilities.

Coal Securities, Limited.

Authorized Capital: \$1,000,000.00.
 President: Andrew Laidlaw.
 Directors: Andrew Laidlaw, J. D. Farrell, M. H. Allworth, G. A. B. Jackson and J. H. Farmer.
 Secretary: J. H. Farmer.
 Head Office: Frank, Alta.

This company controls 12,000 acres on the South Fork, but there has been no work done on the property during the past year.

The Fernie Syndicate also controls a considerable area of coal lands on the South Fork, but no work has been done on their properties during the past year.

In the district surrounding Pincher Creek, 18 mines are being operated on a small scale, the output from these mines only supplying local demand. The seams of coal vary from 4 ft. to 25 ft. in thickness and is pitching at an inclination of about 45 degrees and is of a Bituminous character. It is expected that in the near future when railway facilities are provided that these mines will be operated on a much larger scale.

About twelve miles south of the Crow's Nest Pass branch of the Canadian Pacific Railway in the district tributary to the south fork of the Old Man River, several extensive properties are being developed and will be operated when railway connections are made. These seams are of a very good quality of Bituminous coal.

LETHBRIDGE DISTRICT.

MR. SAMUEL A. JONES, DISTRICT INSPECTOR OF MINES, LETHBRIDGE.

Department of Natural Resources, Canadian Pacific Railway.

President: Sir Thos. G. Shaughnessy, K.C.V.O.
 Directors: Richard B. Angus; Adam Creelman, K.C.; Hon. James Duns-
 muir; Sir Sanford Flemming, K.C.M.G.; Herbert S. Hold; Chas. R.
 Hosmer; Hon. Robt. McKay; Senator Wilmott D. Matthews; David
 McNicoll; Sir Edmund B. Osler, M.P.; Sir Thos. G. Shaughnessy;
 Sir Thos. Skinner, Bart.; Rt. Hon. Lord Strathcona, G.C.M.G.; Sir
 Wm. C. Van Horne, K.C.M.G., and Sir Wm. Whyte.
 Vice-President: David McNicoll.
 Secretary: W. R. Baker.
 Treasurer: H. E. Suckling.
 General Manager: P. L. Naismith.
 General Superintendent: Lewis Stockett.
 Head Office: Montreal, Que.
 Mine Office: Lethbridge, Alta.
 Manager: Robt. Livingstone.
 Pit Bosses: J. C. Livingstone, Jno. Stevenson, and G. H. Quigley.
 Fire Bosses: S. McLeary, W. D. McMillan, R. Scott, Andrew Queen, S.
 Coutts, Hugh Evans, Andrew Baxter, Peter Ramsay, C. W. Taylor.
 Master Mechanic: H. A. McMillan.
 Engineer: V. Kellett.

This company is operating two mines known as No. 3 and No. 6. In the No. 3 mine the endless rope haulage system has been extended about 800 ft. A telephone system is installed in both mines, also fire protection in all underground stables.

No. 6 shaft is situated about four miles north of Lethbridge. The following improvements have been made during the past year: An addition to the workshop, 27 ft. by 38 ft., built of brick, with the following machinery installed, steam hammer, radial drill, hack-saw, bolt threading machine, pipe-threading machine and two lathes. One two-storey storehouse, 30 ft. by 60 ft., built of brick; one two-stage air-

compressor with a capacity of 2,100 cub. ft. of free air per minute and one 200 k.w. generator. An endless rope haulage engine and gear have been completed, also rope installed on the east side of the workings 8,000 ft. in length, making a total of 16,000 ft. now in use. One hundred mine cars have also been added.

Lethbridge Collieries, Limited.

Authorized Capital: \$3,000,000.00.
President: E. B. Greenshields.
Directors: E. B. Greenshields, H. A. Lovett, K.C.; J. S. Hough, J. W. McConnell, Nathaniel Curry, Hon. Robt. McKay, D. B. Adams, Isaac Cockburn and C. H. Campbell.
Vice-Presidents: J. S. Hough and Robt. McKay.
Secretary-Treasurer: S. T. Mannis.
Head Office: Montreal, Que.
Mine Office: Hull Buildings, Lethbridge, Alta.
General Manager: Chas. Fergie.
General Superintendent: W. Maxwell.
Comptroller: F. Cameron.
Construction Engineer: N. C. Pitcher.
Mine Manager: T. O'Donnell.
Pit Boss: John D. Keith.

This mine is situated at Coalhurst, about six miles northwest of Lethbridge on the west side of the Belly River, and is entered by means of shafts.

The underground workings are laid out on the room and pillar system and the shaft bottom supported by means of steel girders carried on walls of concrete. The shaft is equipped with tandem cages, each cage having four shoes the full height of the cage to prevent cutting in on the guides, which are of Douglas fir.

The mine is equipped with Ingersoll coal cutting machines of the Puncher type. Monobel is used for blasting and all shots are fired by certificated persons by means of electric batteries; safety lamps of the Wolf pattern are used throughout the mine.

The following plant has been installed: A steel tippie electrically driven, with rotary dumps and shaker screens, giving four sizes of coal; powerhouse, built of brick with concrete foundations, accommodating two units of Babcock & Wilcox boilers of 1,000 h.p. capacity with chain grates and induced draft; one Walker air-compressor with a capacity of 3,000 cub. ft. of free air per minute; one generator a.c. 250 k.w. direct connected to a vertical engine; one generator, 25 k.w. direct connected to an Ideal engine; three 25 k.w. transformers and a four-panel switch-board; two Weir vertical feed pumps, a Walker hoist at the main shaft with a 5 ft. by 12 ft. drum; a fan of the Walker type connected with a Walker engine by ropes, also an Ottumwa boxcar loader.

Royal Collieries, Limited.

Authorized Capital: \$3,000,000.00.
President: A. C. Flumerfelt.
Directors: A. C. Flumerfelt, A. Laidlaw, H. N. Galer, H. Davidson and W. C. Nicols.
Vice-President: A. Laidlaw.

General Manager: H. N. Galer.
Mine Manager: E. Proctor White.
Secretary: S. H. Fisher.
Head Office and Mine Office: Royal View, Alta.

This mine is situated at Royal View, about six miles north of Lethbridge and connected to the Canadian Pacific Railway by means of a spur.

It is entered by means of a slope and the underground workings are developed on the room and pillar system.

Ventilation is produced by an electrically driven fan and the haulage is done by means of an electric locomotive.

The tippie consists of screen and picking belts with rotary dump for four cars.

Chinook Coal Company, Limited.

Authorized Capital: \$3,000,000.00.
President: W. A. Wood.
Directors: W. A. Wood, C. R. Somerville, L. G. De Vebre, R. Cassells,
H. A. McCallum, Miller Lash and C. Cook.
Secretary-Treasurer: W. E. Davidson.
General Manager: J. C. Reid.
Head Office: Sherlock Block, Lethbridge, Alta.
Mine Office: Coalgate.
Manager: Willis P. Thomas.
Pit Boss: Daniel J. Hughes.

This mine is situated on the west side of the Belly River about one and a half miles north of Diamond City, and is entered by means of shafts.

The colliery buildings are built of brick with concrete foundations. A steel tippie with self-dumping cages has been erected.

The mine is opened out on the room and pillar method. Open lights are used, no gas having been found. Ventilation is produced by means of a Sullivan fan, 8½ ft. in diameter, which is capable of producing 200,000 cubic feet of air per minute.

The plant is capable of handling 1,200 tons per eight hours. A four-stage turbine driven by a 125 h.p. a.c. motor is used for pumping water. A spur track 6 miles long has been built from the main line of the Canadian Pacific Railway to the mine. Forty cottages have been built for the use of the workmen.

Diamond Coal Company, Limited.

Authorized Capital: \$1,500,000.00.
President: Hon. G. H. V. Bulyea.
Directors: Dr. C. W. Clarke, G. T. Stephens, T. Robertson, L. V. Kerr
and H. A. McLean.
Secretary-Treasurer: Thos. Underwood.
General Manager: Thos. Underwood.
Head Office: Calgary, Alta.
Mine Office: Diamond City.
Pit Boss: J. Bamling.
Master Mechanic—T. Hargreaves.
Engineer—R. Watson.
Accountant: G. Porter.

This mine is situated about ten miles north of Lethbridge and connected to the main line of the Canadian Pacific Railway by a spur 14 miles long.

Ventilation is produced by a Sirroco fan capable of giving 100,000 cubic feet of air per minute, driven by a 75 h. p. motor with a chain drive.

Underground haulage is done by means of two electric locomotives with overhead trolley wire. The coal is hoisted to the tippie by means of an incline on the surface.

Ingersoll cutting machines of the Puncher type have been installed. The plant is capable of handling 800 tons per eight hours.

The following plant has been installed: Babcock and Wilcox boilers of 500 h.p. capacity, with chain grates, mechanical stokers and induced draft, one air-compressor with a capacity of 3,120 cubic feet of free air per minute. A wash-house equipped with lockers and sprays has been erected.

Pioneer Coal Mine.

This mine is situated on the opposite side of the river from Lethbridge and is operated by James Ashcroft. The output is taken away by teams and supplies local demand only.

City of Lethbridge Mine.

This mine is situated on the river bottom and is operated by the City of Lethbridge for supplying coal to the city power plant and offices.

The coal is hauled along a tramway to the power plant and dumped into bunkers.

New Barnes Coal Mine Company.

Mine Manager: James A. Richards.

This mine is situated six miles north of Lethbridge and is entered by means of a drift.

The coal is all hauled from the mine by teams.

Canada West Coal Company, Limited.

Authorized Capital: \$2,000,000.00.

President: O. A. Robertson.

Directors: O. A. Robertson, F. E. Kenaston, S. H. Bowman and S. T. Starnes.

Secretary-Treasurer: J. R. Howard.

Managing Director: F. E. Kenaston.

General Manager: J. R. Howard.

Mine Manager: Moses Johnson.

Pit Boss: O. E. Saville.

Head Office: Taber, Alta.

Mine Office: Taber, Alta.

This mine is situated at Taber and is connected by a spur to the Canadian Pacific Railway.

This mine is entered by means of a slope, the seam being about 3 ft. 10 ins. in thickness and worked on the room and pillar system. The coal is hauled to the foot of the slope by electric locomotives with overhead trolley wire.

Golden West Coal Mining Company, Limited.

Authorized Capital: \$50,000.00.

President: E. S. Bowden.

Directors: E. S. Bowden, G. Ridley, A. L. Bowden.

Secretary-Treasurer: A. L. Bowden.

Manager: H. C. Black.

This mine is situated on the north side of the Belly River, about three and a half miles from Taber, and is entered by means of a drift. The seam is 4 ft. in thickness and is worked on the room and pillar system.

White Ash Collieries, Limited.

Authorized Capital: \$10,000.00.

President and General Manager: W. E. Bullock.

Vice-President: Roy Bullock.

Secretary-Treasurer: Clare Bullock.

Head and Mine Office: Taber, Alta.

Mine Manager: John Marsh.

Pit Boss: John H. Marsh.

This mine is situated about four miles northeast of Taber and is entered by means of a drift. The coal is 4 ft. in thickness and is opened out on the room and pillar system.

The coal is hauled up an incline on the surface to the tippie, from where it is hauled away by teams.

The present plant consists of: One Leonard boiler, return tubular of 150 h.p. capacity, one air compressor, 1,000 cub. ft. capacity per minute, one Fairbanks-Morse gasoline hoist of 25 h.p. capacity and three Ingersoll machines, private water system with a 7¼ by 5¼ by 8 in. pump driven by compressed air.

Superior Coal Company, Limited.

Authorized Capital: \$1,500,000.00.

President: B. K. Bullock.

Directors: B. K. Bullock, A. L. Bullock, C. C. Cook, W. Henderson.

Secretary-Treasurer: C. C. Cook.

General Manager: W. Henderson.

Head Office: Taber, Alta.

Mine Manager: John Bastian.

Accountant: I. Parkes.

This mine is situated on the north side of the Belly River, about four miles from Taber and is entered by means of a drift. The coal is 4 ft. in thickness and lies at a depth of 80 ft. from the surface.

The whole output is mined by means of coal cutting machines.

The plant consists of: One battery of Babcock & Wilcox boilers of 250 h.p. capacity, one Canadian Rand straight line air compressor, giving 800 cub. ft. of free air per minute, five Ingersoll punching machines, two Siskol machines.

Twenty-four miner's cottages, one boarding house, a fully equipped blacksmith's shop and powder store have been built.

Eurcka Coal Company, Limited.

Authorized Capital: \$40,000.00.
President: F. Barton.
Directors: F. Barton, J. F. Kramer, A. L. Mitchell, B. Smith.
Secretary: B. Smith.
Treasurer: J. F. Kramer.
General Manager: F. Barton.
Pit Boss: D. L. Millar.
Head Office: Taber, Alta.

This mine is situated about one mile from Taber and is entered by means of a shaft 100 ft. deep. The seam is 4 ft. in thickness and is worked on the room and pillar system.

Domestic Coal Company.

This mine is situated about two miles west of Taber and is entered by means of a drift.

Elcan Coal Company.

This seam is 3 ft. in thickness with an excellent roof and is worked on the room and pillar system.

Canadian Pacific Railway Company.

This mine is situated on the river about three miles north of Taber, and is operated to supply fuel for the pumping plant belonging to the Canadian Pacific Railway Company.

The Alberta Consolidated Coal Company, Limited.

This mine is situated at Elcan and has railway connections made to the mine by a spur track from the Canadian Pacific Railway.

The Independent Coal Company.

This company has leased part of their property to David Ferguson, who is operating on a small scale.

The seam is 3 ft. 2 ins. in thickness and is worked on the room and pillar system.

Rock Springs Coal and Brick Company, Limited.

Authorized Capital: \$500,000.00.

President: B. K. Bullock.

Directors: B. K. Bullock, A. L. Bullock, W. Henderson and C. C. Cook.

Secretary-Treasurer: C. C. Cook.

General Manager: W. Henderson.

Head Office: Taber, Alta.

Mine Office: Taber, Alta.

Mine Manager: Robert Lee.

The property of this company, comprising 480 acres, is situated at Elcan and is connected with the Canadian Pacific Railway by means of a spur track.

The seam is about 3 ft. 6 ins. in thickness and is worked on the room and pillar system, the output underground is hauled by horses and hoisted to a wooden tippie by means of a steam hoist.

Ventilation is produced by a Sturtevant exhaust fan direct connected.

The mine is equipped with: Ingersoll coal cutting machines, capable of producing 500 tons per day; two Polson boilers, 100 h.p. capacity each; one Abel boiler, 200 h.p. capacity; one Cookson feed water heater; one air compressor with a capacity of 1,300 cub. ft. of free air per minute; one 35 h.p. capacity hoisting engine; three Siskol shearing machines; two Blake, one Fairbanks, one Cameron and five International pumps; a private water system with concrete storage tanks of 50,000 gallons capacity, a wooden tippie with bar screens and automatic revolving dump; a Sturtevant fan of 25,000 ft. capacity per minute; Fairbanks weigh scales of two ton capacity; Guernsey weigh scales of 100 tons capacity, 125 mine cars, 19 cottages, mine office, blacksmith's shop, powder and powerhouse built of wood, wash-house 16 ft. by 24 ft., equipped with lockers and steam heated.

Monarch Collieries, Limited.

Authorized Capital: \$50,000.00.

President: W. W. Douglas.

Directors: W. W. Douglas, J. B. Pishe, and S. N. Richards.

Secretary-Treasurer: W. W. Douglas.

Manager: Jno. Howells.

Head Office: Taber.

This mine is situated about four miles west of Taber, the output being hauled away by teams.

The mine is entered by means of a drift, the coal being 3 ft. in thickness and worked on the room and pillar system.

Little Wonder Coal Mine.

This mine is situated about five miles south of Grassy Lake and is entered by means of a drift. The seam is divided into layers, having top coal 2 ft. 3 in. thick, band of shale 12 in. thick, and bottom coal 12 in. in thickness.

Operated by George Gibson.

This mine is situated about six miles from Grassy Lake and is entered by means of a slope.

Sunlight Coal Company.

This mine is situated about $2\frac{1}{2}$ miles south of Grassy Lake and is entered by means of a slope and worked by means of a modification of the long wall system. The coal is 3 ft. 3 ins. in thickness with a good roof.

Mine Operated by A. C. Gage.

This mine is situated about 12 miles south of Bow Island and is entered by means of a shaft. The coal is 26 ins. in thickness and is worked on the room and pillar system.

Mine Operated by G. W. Hines.

This mine is situated about 12 miles south of Bow Island and is entered by means of shafts. The coal seam is thin and is worked on the room and pillar system.

Mine Operated by Nat. Walwork.

This mine is situated about four miles north of Bow Island and supplies local demand only.

Mine Operated by David Long.

This mine is situated about six miles north of Bow Island, the seam being 2 ft. 10 ins. in thickness.

Mine Operated by W. J. Manary.

This mine is situated about 12 miles north of Bow Island and supplies local demand only.

Mine Operated by Julius Lavenne.

This mine is situated about 11 miles north of Bow Island and is worked on a small scale.

Mine Operated by F. Freidenberg.

This mine is situated about 25 miles south of Seven Persons and is worked on a small scale.

Mine Operated by Stephen Schmidt.

This mine has no railway connections and is only employing about four men, the output being sold to the farmers in the district.

Mine Operated by Samuel Brockhouse.

This mine, which is operated on a small scale, is situated about two miles from Milk River and is entered by means of a drift.

Mine Operated by Joseph Oborn.

This mine is situated about four miles from Milk River and is being operated on a very small scale.

Mine Operated by D. G. McKay.

This mine is situated about five miles from Milk River and is operated on a small scale.

Mine Operated by Duncan Kippen.

This property is worked by stripping the surface, as there is only 8 ft. of cover over the coal.

Iron Spring Coal Mine.

This mine is operated by George Heighes and situated about 25 miles north of Lethbridge. It is entered by means of a drift and is worked on the room and pillar system, the coal being hoisted by means of an incline on the surface to the tippie.

Bathurst Coal Company, Limited.

Authorized Capital: \$20,000,000.

President: A. T. Aithens.

Directors: A. T. Aithens, W. Sloan, A. J. McGuire and W. H. Church.

Sec.-Treasurer: W. H. Church.

Manager: A. J. McGuire.

This mine is situated about one mile north of Diamond City and is entered by means of a drift.

The coal is hoisted by means of a gasoline engine up an incline pitching at 25 degrees on the surface to the tippie.

There are no railway connections, the output being hauled in wagons to the spur track at Diamond City.

The plant at present is as follows: Engine house, built of wood and accommodates a 25 h.p. gasoline hoisting engine, a wooden tippie with bunker capacity of 25 tons, blacksmith's shop, carpenter's shop and storehouse.

EDMONTON DISTRICT

MR. ELIJAH HEATHCOTE, DISTRICT INSPECTOR OF MINES,
WETASKIWIN.

The Dawson Coal Co., Limited.

Authorized Capital: \$30,000.00.
President: Richard Gerard.
Vice-President: John Henderson.
Directors: H. J. Dawson, J. D. Hyndman and Joseph Hostyn.
Secretary: Chas. A. Hyndman.
Head Office: Edmonton, Alta.
Mine Office: Edmonton, Alta.
General Manager—Chas. A. Hyndman.
Mine Manager: J. A. McLenhan.

A three-compartment shaft, 6 ft. 6 ins. by 15 ft. 8 ins., has been sunk to the coal a distance of 112 ft. A tippie capable of handling 500 tons per day has been erected. A considerable amount of work has been done underground, the main roadways having been enlarged to allow for horse haulage. These roads have all been laid with 1½ lb. steel.

The Humberstone Coal Company.

Head Office: Edmonton.
Mine Office: Clover Bar.
General Manager: E. E. Brewer.
Mine Manager: David Jones.
Master Mechanic: James Cheyns.
Pit Boss: William Duggan.

This company controls 170 acres of coal lands near Clover Bar.

A tippie has been erected capable of handling 400 tons per day, and a shaft fitted up with self-dumping cages. A 60 h.p. boiler and one 80 h.p. boiler have been installed, and a single stage air compressor and fan of the Waddle type capable of producing 12,000 cubic feet of air per minute when running at 100 revolutions has been also installed.

It is intended to have a spur track put into this mine from the main line of the Grand Trunk Pacific Railway.

Two rectangular shafts have been sunk on this property, each 11 ft. 6 ins. by 6 ft. 6 ins. During the past year the hoisting shaft has been relined with 2 in. by 10 in. lagging and 4 in. by 6 in. sets.

Edmonton Standard Coal Company, Limited.

Authorized Capital: \$500,000.00.
President: H. Waddington.
Vice-President: G. E. Ellis.
General Manager: William Munns.
Head Office: Toronto, Ont.
Mine Office: Edmonton.
Mine Manager: F. B. Smith.
Pit Boss: D. Morris.

A large amount of development work has been done at this mine during the past year, and in order to deal with the water in different parts of the mine, collecting pumps have been installed.

The output from this mine is delivered by teams in the City of Edmonton.

The Great West Coal Company, Limited.

Authorized Capital: \$150,000.00.
President: James C. Dunn.
Directors: James C. Dunn, Alex. C. Dunn and W. S. Cupple.
Sec.-Treasurer: W. S. Cupple.
Head Office: Edmonton.
Mine Office: Clover Bar.
General Manager: Alex. C. Dunn.
Mine Manager: Alex. C. Dunn.
Mining Engineer: John Russell.
Master Mechanic: A. Blamonte.
Pit Bosses: P. J. Murphy and T. Strickland.

This company controls 1,138 acres of coal lands, the thickness of the coal varying from 4½ ft. to 7½ ft.

During the past year two and a half miles of track were laid from the main line of the Grand Trunk Pacific Railway, near Clover Bar, to the mine.

Two shafts are sunk on the property to the coal which was reached at a depth of 180 ft. The hoisting shaft is 14 ft. by 9½ ft., and the air shaft is 9 ft. by 6 ft. A tippie has been erected capable of handling 1,000 tons of coal per day and is fitted with rotary dump and two shaker screens. The hoisting engine is 16 in. by 30 in., steam being supplied by two Robb-Mumford boilers and two Waterous boilers of 110 h.p. each. An 18 in. duplex air compressor manufactured by A. T. Green of Rothersham, England, and driven by a 19¼ in. by 36 in. duplex steam engine, has been installed for the purpose of supplying air for coal cutting machines. A Schiele fan capable of producing 250,000 cub. ft. of air per minute when running at 315 revolutions per minute is being installed and will be coupled up to a 16 in. by 24 in. engine by means of a belt. A 37 k.w. generator is also being installed.

This plant was erected in the early part of the past year, but was completely destroyed by fire during the month of May and has just been rebuilt again.

Clover Bar Coal Company, Limited.

Authorized Capital: \$500,000.00.
President: H. E. Rogers.
Vice-President: J. J. Milledge.
Directors: H. E. Rogers, J. J. Milledge and W. H. Robertson.
Secretary: J. F. Hunter.
Treasurer: H. H. Robertson.
Head Office: Edmonton.
Mine Office: Clover Bar.
General Manager: J. F. Hunter.
Mine Manager: David Jones.
Pit Boss: W. Jinks.

This company has 813 acres of coal lands, near Edmonton, and are operating a seam of lignite coal 7 ft. thick. The mine is connected to the main line of the Grand Trunk Pacific Railway by means of a spur track about 3,000 ft. long. The shaft on this property is 85 ft. in depth and is 14 ft. by 7 ft., the hoisting engine being 14 in. by 30 in.

Alberta Coal Mining Company, Limited.

Authorized Capital: \$250,000.00.
President: James L. Bell.
Vice-President: W. L. Carter.
Managing Director: George S. Montgomery.
Secy.-Treas: George S. Montgomery.
Directors: James L. Bell, W. L. Carter and George S. Montgomery.
Head Office: Edmonton.
Mine Manager: C. C. Richards.
Pit Boss—Gus Ostheidt.

This company controls an area of 320 acres of coal lands, and are working a seam $7\frac{1}{2}$ ft. in thickness. The plant is connected to the Canadian Northern Railway by means of a spur track.

Several buildings have been erected during the past year and a considerable amount of development work done. The main entry has been driven a distance of 1,600 ft. and is laid with 12 lb. steel rails. The mine cars have a capacity of two tons each.

The Cardiff Collieries, Limited.

Authorized Capital: \$700,000.00.
President: Lieut.-Col. J. W. del O'Grady.
Vice-President: Andrew Kelly.
Managing Director: J. W. del O'Grady.
Directors: J. W. del O'Grady, Andrew Kelly, D. L. Cameron, W. R. Bell, H. H. Chown, J. C. Gage and W. R. Russell.
Secretary: W. E. Brown.
Treasurer: J. C. Gage.
Head Office: Winnipeg, Man.
Mine Office: Cardiff.
General Manager: G. H. Eaton.
Mine Manager: F. B. Smith.
Pit Boss: William Gilliland.

The seam of coal being worked on this property is 14 ft. in thickness with about 14 ft. of cover over it. A slope was driven from the surface to the coal and extended up by means of trestle work to the tippie. The tippie is fitted with Jeffrey shaking screens connected to a steam engine by means of a belt. The coal is hauled up the incline to the tippie by means of the creeper rope haul. A box car loader has been installed during the past year.

Battle River Collieries.

President: O. H. Anderson.
Vice-President: A. S. Rosenroll.
Mine Office: Rosenroll.
Pit Boss: T. L. Parsons.

This company controls an area of 3,200 acres of coal lands, and is operating a seam of lignite coal which is 8 ft. in thickness. The plant is connected to the Canadian Pacific Railway by means of a spur track 2,500 feet in length.

Two rectangular shafts have been sunk to the coal which was reached at a depth of 162 ft. The tippie is capable of handling 400 tons per day. All coal is mined by means of four Sullivan compressed air machines, the compressed air being produced for this purpose by a Sullivan air compressor.

The Spicer Coal Company, Limited.

Authorized Capital: \$100,000.00.
 President: John C. Bell.
 Vice-President: Jas. D. McDonald.
 Managing Director: John Spicer.
 Directors: John C. Bell, J. D. McDonald, John Spicer, T. H. McCallum,
 A. M. McIntyre and R. T. Cowan.
 Secretary: T. K. McCallum.
 Treasurer: John Spicer.
 Head Office: Saskatoon, Sask.
 Mine Office: Dinant.
 General Manager: John Spicer.
 Pit Boss: Jesse Horn.

The output from this mine is hauled to the Grand Trunk Pacific Railway by means of teams, as there are no railway facilities. The mine is being operated on a small scale only, but during the present year it is intended to carry on considerable development work.

Security Coal Mines Company, Limited.

Authorized Capital: \$1,000,000.
 President: Sir James Grant.
 Vice-President: William C. Dunn.
 Secretary: Chas. E. Merwin.
 Treasurer: Chas. E. Merwin.
 Directors: Sir James Grant, George G. Armstrong, George Harcourt, Chas.
 E. Merwin and William C. Dunn.
 Head Office: Edmonton.
 Mine Office: Edmonton.

This company controls 880 acres of coal lands. It is proposed in the future to build a spur track from the mine to the Grand Trunk Pacific Railway. The mine so far has only been worked intermittently and on a small scale. At present there is no machinery.

St. Albert Collieries, Limited.

Authorized Capital: \$750,000.00.
 President: E. B. Greenshields.
 Vice-President: H. A. Lovett.
 Secretary: G. F. Gyles.
 General Manager: Charles Fergie.
 Directors: E. B. Greenshields, H. A. Lovett, R. Brutinel, I. W. McConnel,
 Hon. Robert Mackay.
 Head Office: Montreal, Que.
 Mine Office: St. Albert.
 Mine Manager: E. Ashburner.

The property controlled by this company is situated about eight miles north of Edmonton. During the year 1911 two rectangular shafts were sunk to a depth of 84 ft., but had to be abandoned owing to sand and water being encountered. It was then decided to sink a circular shaft lined with concrete, and a contract was let to the Foundation Company of Montreal and New York. This shaft is now down a distance of 205 ft. It was commenced with an inside diameter of 30 ft. with concrete walls 5 ft. thick. A V-shaped cutting-edge was put in and as the concrete was built above it, this edge gradually sank. The first portion of the sinking was successfully carried down through the sand bed to the blue clay which divided this bed into two portions. The shaft was then

sunk in rectangular form and is 13 ft. 8 ins. by 13 ft. 4 ins. The shafts have still about 100 ft. to go to reach the coal.

The plant is connected to the Canadian Northern Railway by means of a spur track.

The Pacific Pass Coal Fields, Limited.

Authorized Capital: \$5,000,000.00.
 President: E. B. Greenshields
 Vice-President: Hon. Robt. Mackay.
 Managing Director: Charles Fergie.
 Directors: N. Curry, John T. Ross, H. A. Lovett, A. H. Cook, William M. Macpherson, J. G. Scott, Hon. P. A. Choquette, Paul A. Normand and A. de Bernis.
 Sec.-Treasurer: Samuel T. Mains.
 Head Office: Montreal, Que.
 Mine Office: Fergie, via Bickerdike.
 Mine Manager: P. Christianson.
 Mechanical Engineer: A. B. Carr.
 Pit Boss: W. G. Heeley.
 Fire Bosses: Allan Hamilton and Michael Joyce.

This company controls 40,000 acres of coal lands, which contain six workable seams of coal, giving a total thickness of 108 ft. The measures are lying at an inclination of 25 degrees and the strike of the seam is southeast. The mine is connected to the Alberta Coal Branch of the Grand Trunk Pacific Railway by means of a spur track.

A timber trestle has been built connecting the mines on the north and south sides of the river, the coal being brought to one tippie from both mines. The tippie which is fitted with the cross-over dump is capable of handling 1,000 tons per day.

Five boilers of 100 h.p. capacity each are installed, also a Sirocco fan capable of producing 15,000 cub. ft. of air per minute running at a speed of 150 revolutions per minute. Safety lamps of the Wolfe pattern are used throughout this mine. Monobel is used for blasting and all shots are fired by means of electric batteries.

Mountain Park Coal Company, Limited.

Authorized Capital: \$1,500,000.00.
 President: C. J. Heyland.
 Directors: C. J. Heyland, J. C. C. Bremner, L. W. Jones and N. M. Thornton.
 Secretary: F. B. Macmalim.
 Head Office: Edmonton.
 Mine Office: Mountain Park Collieries.
 Engineer: L. E. Drummond.
 Master Mechanic: E. Watson.
 Manager: J. Derbyshire.
 Fire Bosses: James Crowder and Wm. Eccleston.

This company controls 6,000 acres of coal lands, containing 4 seams of good bituminous coal. These seams are 6 ft. 6 ins., 4 ft. 6 ins., 3 ft. and 20 ft. in thickness respectively, and are pitching at an inclination of about 30 degrees. The strike of the seams is N. 70 degrees E.

This plant is being connected to the Alberta coal branch of the Grand Trunk Pacific Railway by means of a spur track, which is being

built from mile 37. Ten miles of this spur have been built and it is expected that it will be completed during the early part of the present year. Three 50 h.p. boilers have been installed, also one 75 k.w. generator. Levels have been driven in Nos. 1, 2 and 3 seams for a distance of about 450 ft., the output at present being put to stock.

Safety lamps are used throughout these mines. Monobel is used for blasting and all shots are fired by means of electric batteries.

McLeod Collieries, Limited.

Authorized Capital: \$100,000.00.
Managing Director: Jas. A. Collins.
Directors: J. A. Collins, John A. Hamilton, George B. Henwood and S. B. Stowe.
Sec.-Treas: S. B. Stowe.
Head Office: Edmonton.
Mine Office: Mile 37, Alberta Coal Branch.
Engineer: Chas. H. Colgrove.
Pit Boss: J. A. Macdonald.

This company controls 2,192 acres of coal lands which contain seams of a bituminous nature varying in thickness from 6 ft. to 30 ft. and pitching at an inclination of about 60 degrees.

A tippie capable of handling 1,000 tons of coal in ten hours has been erected, the coal being hauled to the tippie by means of a slope by tail rope haulage. The seam at present being worked is 12 ft. in thickness.

The Yellowhead Pass Coal and Coke Company, Limited.

Authorized Capital: \$1,000,000.00.
President: M. J. O'Brien.
Vice-President: M. Doherty.
Managing Director: G. H. Richardson.
Secy.-Treas: F. W. Rous.
Head Office: Montreal, Que.
Mine Office: Bickerdike.
General Manager: J. R. Roaf.
Mine Manager: F. B. Smith.
Master Mechanic: H. Ryan.
Pit Boss: Thomas Mather.
Fire Bosses: D. Archibald, D. Ludbrook and J. W. Kerr.

This company controls 8,515 acres of coal lands. The mine is opened out on each side of a creek and a trestle built across connecting the two mines. The tippie is capable of handling an output of about 500 tons per day. Slopes are driven a distance of about 2,000 ft. in the coal on each side of the creek.

Safety lamps of the Wolfe pattern are used throughout the mines, and all shots are fired by means of electric batteries.

North Alberta Coal Syndicate, Limited.

This company controls 5,000 acres of coal lands in Jasper Park, and during the past year have done a considerable amount of prospect work. Four workable seams of a good bituminous coal have been found varying

in thickness from 4 ft. 6 ins. to 14 ft. and pitching at an inclination of 65 degrees.

It is expected that this mine will be connected with the Grand Trunk Pacific Railway during the present year by means of a spur track 5 miles long. Tunnels have been driven in the 14 ft. and 10 ft. seams for a distance of 500 ft. each.

Jasper Park Collieries, Limited.

Authorized Capital: \$2,500,000.00.
President: Andrew Laidlaw.
Vice-President: J. L. Cote.
Managing Director: Andrew Laidlaw.
Directors: Andrew Laidlaw, M. H. Alworth, J. G. Short, H. B. Round, J. L. Cote and R. H. Morris.
Secretary: H. E. Pearson.
Treasurer: R. J. Maxwell.
Head Office: Edmonton.
Mine Office: Pocaahontas.
General Manager: R. H. Morris.
Mine Manager: Edwin Sparrow.
Engineer: G. H. Morse.
Master Mechanic: Mike Saunders.
Pit Boss: Edwin Sparrow.
Fire Bosses: Alex. Scott, A. J. Brown and D. J. Gwilliam.

This company controls 10,240 acres of coal lands, containing three workable seams varying in thickness from 8 ft. to 12 ft. and pitching at an inclination of 56 degrees.

The plant is situated on the main line of the Grand Trunk Pacific Railway in Jasper Park. A tippie capable of handling 1,500 tons per day has been erected during the past year and fitted with cross-over dump and shaker screens. Four 150 h.p. return tubular boilers of the Leonard type have been installed, also generators. A Robb steam engine 11 by 12 is used for driving these generators.

A tunnel 2,200 ft. in length has been driven to connect the workings to the new tippie. This will also be the means of giving a much greater lift of coal. Difficulties were encountered in driving this tunnel, as 400 ft. of it had to be driven through gravel heavily impregnated with water.

A Sheldon fan capable of producing 22,000 cub. ft. of air per minute when running at 200 revolutions per minute, has been installed.

Safety lamps of the Wolfe pattern are used throughout the mine, and all shots are fired by means of electric batteries.

Pembina Coal Company.

Authorized Capital: \$1,500,000.00.
President: H. M. Evans.
General Manager: M. L. Hyde.
Mine Manager: J. E. Roberts.
Master Mechanic: Chas. Brenton.

The holdings of this company are situated west of the Pembina river, 60 miles from Edmonton on the main line of the Grand Trunk Pacific Railway.

Two rectangular shafts 12 ft. by 18 ft. have been sunk in the centre of the property and reach the seam at a depth of 265 ft. The coal seam has a total thickness of 24 ft., of which 8 ft. 6 ins. is being worked. The system adopted consists of four main entries running north and south with cross entries east and west and panel entries taken off these parallel to the mains.

The tippie is electrically driven and lighted and is complete with rock, local coal and boiler coal bins.

The hoisting engine-room consists of a frame building and is equipped with an 18 in. by 36 in. first motion Linchfield hoist with two 6ft. dia. by 28 in. cylindrical drums and overwinding device.

In the engine-room there is a 65 k.w. 250 v.d.c generator driven by a 12 by 12 Ideal engine. A 250 k.w. mixed pressure turbine will be installed in the near future and exhaust steam from the hoist will be carried through a regenerator to the turbine.

The boiler and wash-room are in a combination frame building. Two 150 h.p. tubular boilers, 150 lb. pressure are installed. One 7½ by 4 ½ by 10 Platt duplex feed pump and one Stillwell open feed water heater are also located in the boiler-room. The wash-house is equipped with shower baths and chain hangers for the clothes.

The machine shop and supply house are in one building. The shop tools are electrically driven and consist of a combination saw, pipe and bolt machine, 20 in. drill, grindstone, emery wheel, 100 lb. hammer and hack saw, besides forges, etc.

The coal deposits in the district tributary to the main line of the Grand Trunk Pacific Railway are being opened up and developed by six different companies, namely: Jasper Park Collieries, Limited; North Alberta Coal Syndicate, Yellowhead Pass Coal and Coke Co., Limited; Pacific Pass Coal Fields, Limited; Mountain Park Coal Company, Limited and the Macleod Collieries, Limited. Practically all these mines are now equipped with surface plants capable of handling from 800 to 1,500 tons of coal per day each.

The Alberta coal branch of the Grand Trunk Pacific Railway, which leaves the main line of this railway at Bickerdike, is completed to mile 37, where branch lines are being built from this point in different directions to the mines operated by the Yellowhead Pass Coal and Coke Company, Limited, Pacific Pass Coal Fields, Limited and the Mountain Park Coal Company, Limited.

The Jasper Park Collieries, Limited, is situated 83 miles west of Edson on the main line of the Grand Trunk Pacific Railway, and is being developed on the south side of the railway on an extensive scale. It is the intention of this company to build during the present year a plant on the Canadian Northern Railway on the north side of the river, which will be capable of handling 1,500 tons per day also.

Eight miles east of Jasper Park Collieries, is situated the property operated by the North Alberta Syndicate, Limited. A railway has been surveyed to this plant from Prairie Creek on the Grand Trunk Pacific Railway Company, and will probably be built during the present year.

The property owned by the Pembina Coal Company, Limited, is situated 60 miles west of Edmonton on both the Grand Trunk Pacific Railway and the Canadian Northern Railway, and spur tracks built from each of these railways into the plant.

In the district around Edmonton, a large number of small mines each producing from 10 to 150 tons of coal per day, have been operated and their outputs hauled into the City of Edmonton by teams. These mines are, however, gradually being replaced by mines which are being operated on a larger scale. This is due to the fact that owing to the large amount of railway extension which has been going on the output from these larger mines can now be hauled into the city by railway instead of by teams and thus a cheaper coal can be put on the market.

WORK OF INSPECTION.

The district inspectors have made visits of inspection to the different mines in their respective districts as often as possible and have investigated the causes of all fatal and serious accidents and attended all inquests which have been held, and have also, as far as practicable, had the causes of these accidents removed.

Safety lamps are used in all the mines in the bituminous and anthracite coal fields, and in several of the mines in the lignite coal fields, and only explosives which are on the British Permitted List are allowed to be used in these mines. Loose black powder is used in most of the mines in the lignite fields except where compressed black powder is being used and which is giving very satisfactory results.

All shots are fired by means of electric batteries in the bituminous and anthracite coal fields whether gas has been found or not. Shot-firing has also been still further reduced, with the result that a better marketable coal is now being produced. The change in the method of shot-firing and the reduction in the number of shots fired, has, I believe, played an important part in reducing the number of accidents. Very strict measures are being taken by the inspectors to stop all shooting off the solid.

Telephones are installed in the more important mines in the Crow's Nest Pass district and are proving of great service, both in assisting the management of the mine and in getting assistance should an accident occur.

Application was made during the year by the West Canadian Collieries, Limited, Bellevue, for permission to extract the pillars between chute Nos. 45 and 81, but this has been refused owing to the danger of caving, causing explosions by sparks resulting from falls of roof igniting any gas which might accumulate in that portion of the mine.

With reference to the method of working mentioned in my Annual Report for the year 1911 as having been adopted during that year in the shaft mine operated by the Canadian Coal Consolidated, Limited, near Frank, and which I stated I did not approve of, I have to inform you that this method has been abandoned and the angle system again introduced.

A commencement has now been made to move the Town of Frank from the danger zone to a point about half a mile further west, and it is expected that all buildings will be moved from the old townsite within the next few months.

MINE RESCUE STATIONS.

During March, 1912, a Mine Rescue Station was installed and equipped at Blairmore on the Crow's Nest Pass branch of the Canadian Pacific Railway.

This station, which is temporary, was equipped with the Fleuss type of apparatus, after very careful consideration.

The equipment consists of:

Eleven apparatus of the Proto type.

Six apparatus of the Salvator type.

Two oxygen compression pumps.

Two Draeger pulmotors.

One oxygen reviving apparatus.

One animal tester.

Twelve electric hand lamps.

One rectifier for charging lamps.

One meter for testing reducing valves.

The oxygen compression pumps are used for charging the small cylinders from the storage tanks. There are thirty storage tanks, each having a capacity of 100 cubic feet of oxygen.

The twelve electric hand lamps are each capable of holding a charge sufficient to last seven hours.

The station is also equipped with a large number of spare parts to replace any defective or worn out portions of the apparatus. There are also 3,500 pounds of caustic soda kept in reserve at all times.

Mr. Andrew A. Millar was appointed superintendent of this station, his duties being to instruct and train men how to render efficient aid with the apparatus in case of accidents. The candidates for training are divided into teams of five, the training consisting of a thorough knowledge in the use of the apparatus and its various parts, together with a practical course in vitiated atmosphere. The ordinary course lasts at least six days and in several cases this may be extended if the superintendent is of the opinion that the training has not been sufficient. The training takes place partly in the Blairmore mine of the West Canadian Collieries, Limited, the management of which has kindly placed the use of same at our disposal for this purpose, and partly in the smoke chamber at the Rescue Station. The candidates for training are chosen from the various mines, but before they are allowed to participate they have to undergo a medical examination, which is carried out by the various mine doctors who have kindly volunteered to examine candidates for this purpose. It is pleasing to note that no accidents have yet occurred to any of the wearers of the apparatus.

The schedule of training is as follows:

FIRST DAY—Explanation of apparatus by the superintendent; dismantling and assembling the apparatus (Proto & Salvator) by the

members of the team; the application of the Pulmotor and reviving apparatus; the use of the animal air tester in mines after an explosion or mine fire; description of the electric lamp used in conjunction with the rescue apparatus and the application of the compression pump for recharging the cylinders of apparatus from storage tank.

SECOND DAY—Members of team wear the apparatus for one and a half hours while walking a distance of 3,000 feet and ascending a vertical height of 160 feet, each member sawing four ends of a $2\frac{1}{2}$ in. slab, after which they recharge apparatus.

THIRD DAY—Two hours in smoke chamber in strong sulphur fumes where they are occupied in sawing props, erecting brattice and props and carrying rock, each member making ten trips through tunnel and overcast, the temperature of the room being on different occasions over 100 degrees Fah.

FOURTH DAY—Two hours spent in mine, the distance travelled underground being 6,000 feet, part of which consists of ascending a roadway which is 450 ft. in length and pitching at an inclination of 45 degrees.

FIFTH DAY—The work done on the third day is repeated and the team is also instructed how to apply the Salvator in case of accident. A portion of the time is also spent in wearing the Salvator.

SIXTH DAY—Trip through the mine repeated, the team wearing the apparatus for three hours and the distance underground increased to 7,500 ft.

Training in accordance with the above schedule was commenced on March 18th, 1912. Sixty men have undergone the full course of training since the station was opened and a considerably larger number have put in a few days and then discontinued for various reasons. At times considerable difficulty has been experienced in inducing men to undergo the course of training.

The following list comprises the names of the various persons and the mines at which they were employed, who have undergone the complete first course of training:

McGillivray Creek Coal and Coke Company, Coleman.

T. Horne.	George Kellock.
T. Homer.	Alex. B. Hunter.
Emile LeBlanc.	Peter Allen.
James H. Moore.	A. G. McAuley.
T. Parry	

International Coal and Coke Company, Coleman.

W. A. Davidson.	D. A. Macaulay.
M. Morrison.	I. Thomas.
W. Ashurst.	R. Kerr.
D. Davies.	W. C. Allen.
J. Thompson.	

West Canadian Collieries, Limited (Blairmore).

Raoul Green.	J. K. Miller.
S. Shone.	J. McAndrew.
L. P. Roberts.	A. Burmis.
J. Bilteryst.	O. Morgan.
A. Parker.	R. G. Foot.
W. McVey.	M. G. Neyrinck.
K. G. Campbell.	

West Canadian Collieries, Limited (Bellevue).

A. Halworth.	A. Anderson.
H. Blake.	J. Radford.
D. McKay.	J. McGeough.
J. Cooke.	J. Katka.
E. Bridge.	

Canadian Coal Consolidated, Limited (Frank).

J. Reid.	W. Picton.
J. B. Finlayson.	J. H. Robinson.
F. Raynor.	L. Crockett.
J. Nicol.	J. Patterson.

Hillcrest Collieries, Limited (Hillcrest).

H. Hunter.	D. Briscoe.
------------	-------------

Davenport Coal Company, Limited (Burmis).

L. C. Stevens.	T. J. Garrett.
R. Rawlinson.	J. D. Thomas.
T. Sloan.	H. Gates.
G. Carson.	A. W. Barnes.

Miscellaneous.

Francis Aspinall, Lethbridge.
 Andrew A. Millar, Blairmore.
 Dr. A. H. Baker, Blairmore.

It will be noted from the above table that no men have been trained from the mine operated by the Maple Leaf Coal Company.

During the time this station has been in operation, two calls have been made for the use of the apparatus, in each case for the Pulmotor. One call was made by the management of the Blairmore mine of the West Canadian Collieries, Limited, and one by the management of the Hillcrest Collieries, Limited, Hillcrest.

Unfortunately in both cases efforts to restore consciousness were unsuccessful through no fault of the apparatus, as in each case there was too long a delay in sending in a call to the station, particularly in that of the Hillcrest case. To substantiate this remark it is only necessary to quote the doctor's evidence given at the inquest held on the victim of the Hillcrest accident: "Had the Pulmotor been in use sooner, the man's life would without doubt have been saved."

It is necessary to point out that in order to obtain success with the Pulmotor, it is imperative to send for it with the least possible delay, and that it is entirely erroneous to suppose that it is the last resource and only to be applied when all other methods have failed.

On different occasions the Proto apparatus has been subjected to severe tests. In one case the wearer stood over strong sulphur fumes with a blanket inverted over him in the form of an umbrella, the blanket being so placed as to effectually concentrate the fumes, and although the wearer remained over half an hour under these trying conditions, he experienced no bad effects.

Some of the special features of the apparatus installed are:

1st—No important parts liable to be damaged are carried on the back.

2nd—All the valves are under the control and observation of the wearer, who requires no assistance from the other members of the team.

3rd—A bye-pass or emergency valve is provided.

4th—The pressure gauge is fixed in such a position that it can easily be seen by the wearer of the apparatus.

5th—The safety tubes are fitted so that they are not liable to be damaged or detached by contact with projections in the passages of the mine.

6th—The weight is evenly distributed.

7th—Caustic soda, the absorbent used, can be readily obtained in different forms suitable for the apparatus from various places independent of the manufacturers of the apparatus.

8th—No injector is used, thereby obviating the danger of the existence of gas in the surrounding atmosphere.

A record of the training work is being kept at the Blairmore station, in which is recorded any points considered of importance. The oxygen used by the different men who have been trained shows an average of about 70 atmospheres for two hours, therefore, on this basis the oxygen supply, when at 120 atmospheres, the capacity of the cylinders is capable of lasting three and one-half hours. In many instances various persons have used as low as 40 atmospheres in two hours.

At times considerable difficulty has been experienced by the superintendent in charge in getting together a team to undergo training. The Maple Leaf Coal Company and the Hillcrest Collieries, Limited, have been special offenders in this connection.

The former company have had no men trained yet and the latter company have only had two men trained so far. It is gratifying to note, however, that with these two exceptions the operators in this district have given mine rescue training every possible assistance in their power.

A station known as the Lethbridge Mine Rescue Station No. 1 has been built and equipped at No. 6 mine, near Lethbridge, and is being conducted along the same lines as the Crow's Nest Pass Mine Rescue Station. Mr. Wm. B. Powell was appointed superintendent of this station at its commencement in November.

Negotiations have now been completed with the Canadian Pacific Railway Company for obtaining a railway car which will be moved from mine to mine for training purposes and will be readily available in case of emergency. This car will be fitted up with the most modern apparatus and accessories and will be provided with living quarters for the superintendent in charge. I expect it will be ready for use about February of this year.

A case occurred at Lethbridge in December, 1912, where two men were overcome by gas escaping. The Pulmotor was immediately sent for, and the doctor reports that although one man would have probably recovered without it, it was undoubtedly the means of saving the other man's life.

Before any person is allowed to be trained he must produce the following medical certificate properly filled in to show that he is physically fit to undergo training. It is also necessary for a person being

trained to produce a certificate showing that he has taken a course in First Aid Work, fitting him to give assistance to any person injured in or about a mine.

Three months after a man has completed his first course of training he must present himself for another day's training, after which if he is found to be satisfactory he will be granted a certificate.

QUALIFICATIONS OF RESCUE MEN.

Mining men 22 to 45 years old, in good physical condition, who are temperate in their habits and naturally calm and deliberate, are best suited for mine rescue work.

Before a man undergoes training in the use of breathing apparatus, he must be examined by a physician to ascertain his physical condition, especially the action of his heart and lungs and any defects of the nose or throat. Unless a man has a physician's certificate stating that his physical condition is good, he must not be permitted to take rescue training nor to attempt rescue work in a mine.

PHYSICIAN'S EXAMINATION.

Date..... Hour..... M.
 Name..... Age..... Residence.....
 Occupation..... How long so employed
 Time of last meal..... Previous illness of recent date,
 having regard to rheumatism, fits, spitting of blood, asthma, bronchitis,
 giddiness, vertigo, or any unsteadiness of gait
 Habits as regards smoking and drinking
 General appearance, paying special attention to the breathing passages,
 tonsils and nostrils, also ocular conjunctiva, and any infectious condition

 Urine General shape and expansion of the chest
 (See that clothing is loose)
 Frequency of breathing
 Pulse: frequency and character.....
 Condition of lungs
 Condition of arteries and veins
 Heart action
 Nervous or composed temperament?.....
 The candidate is in condition to undergo mine-rescue
 training.

(Signed)

Physician.

LIST OF PROSECUTIONS UNDER THE COAL MINES ACT.

Mine in which Prosecution Was Instituted	Description of Defendant	Offence Charged	Result of Proceedings	Penalty	Costs
West Canadian Collieries, Ltd. (Bellevue)	Miner	General rule 8 (d) section 51. Using an inflammable substance for tampering.	Conviction	\$10.00	\$5.00
West Canadian Collieries, Ltd. (Bellevue)	Miner	General rule 8 (d) section 51. Using an inflammable substance for tampering.	Conviction	\$10.00	\$5.00
Davenport Coal Company. (Burmis)	Tippie Boss	General rule 7 (a) section 51. Having match and pipe on his person in mine.	Conviction	\$10.00	\$3.75

(The above prosecutions were all instituted by the Mine Manager.)

ACCIDENTS.

There were twenty-one fatal accidents during the past year, five of which occurred above ground and sixteen below ground.

The fatal accident which occurred to John Gumbiz in the mine operated by the Diamond Coal Company, Limited, near Diamond City, was caused by the coupling breaking on the first car of a trip which was being hauled up the incline. Gumbiz and another man were riding on this trip when the coupling broke and Gumbiz, failing to get clear of the car, was instantly killed.

The fatal accident which occurred to Herbert F. Price in the mines operated by the Cardiff Collieries, Limited, near Cardiff, was caused by Price being caught between a mine car and the face of a working place. Price was taking a car down a slight inclination when he lost control of it and as he was in front of it, was crushed against the face of the working place by the car and fatally injured.

The fatal accident which occurred to Sam Olatsky in the mines operated by The Canmore Coal Company, Limited, near Canmore, was caused by the deceased apparently striking with his pick an unexploded remnant of Samsonite which had been left from a previous shot.

The fatal accident which occurred to John Vuori in the mine operated by the International Coal and Coke Company, Limited, near Coleman, was caused by a fall of coal at the working face.

The fatal accident which occurred to William T. Baughan in the mine operated by the West Canadian Collieries, Limited, near Bellevue, was caused by a fall of top coal while repairs were being carried on at the outside switch of the main gangway. The fire boss who was in charge at this place had the contract for the work and it would appear from the evidence that a proper examination of the place after the shot had been fired had not been made.

The fatal accident which occurred to Joe Barker in the mine operated by the Department of Natural Resources of the Canadian Pacific Railway near Bankhead was entirely unforeseen, and was caused by a timber rolling off the top of a railway car which was being unloaded. When this timber fell it struck Barker and fractured his skull.

The fatal accident which occurred to Dominick Degano in the mine operated by the McGillivray Creek Coal and Coke Company, Limited, near Coleman, was caused by deceased being crushed between mine cars. It appears that he had been attempting to uncouple a car at the bottom of the incline when the car was allowed to come back, with the result that he was crushed between it and another car.

The fatal accident which occurred to Mike Portskove at the mine operated by the Department of Natural Resources of the Canadian Pacific Railway near Bankhead, was caused by Portskove being buried in the small coal bin. It appears that deceased had gone into this bin for the purpose of cleaning out the remainder of the small coal which was in it when he was buried.

The fatal accident which occurred to Raymond Rockey at the mine operated by the St. Albert Collieries, Limited, near St. Albert, was caused while a cofferdam was being erected. The timbers which were

carrying this cofferdam were too light, the consequence being that they broke, allowing the cofferdam to fall, killing Rockey instantaneously.

The fatal accident which occurred to Martin Targhetta in the mines operated by The Canmore Coal Company, Limited, near Canmore, was another case of an unexploded remnant of Samsonite being struck by a pick, causing it to go off, with the result that Targhetta met his death.

The fatal accident which occurred to Steve Roveluck at the mine operated by the West Canadian Collieries, Limited, near Blairmore, was caused while Roveluck was examining a place to find out how far it had to go before it was driven through into another place. While he was doing this a large amount of coal fell and buried him. Unfortunately the Pulmotor which is kept at the Mine Rescue Station at Blairmore was not used on this man until it was too late to be of any use.

The fatal accident which occurred to Mike Kangas in the mine operated by The Canmore Coal Company, Limited, near Canmore, was caused by Kangas being knocked down a chute by a boulder which fell away from the coal face.

The fatal accident which occurred to Steve Komplin in the mine operated by the Leitch Collieries, Limited, near Passburg, was caused through lack of ventilation in a place which was being driven to connect to another place.

The fatal accident which occurred to Emile Gengembre in the mine operated by the McGillivray Creek Coal and Coke Company, Limited, near Coleman, was caused by a fall of cap rock in one of the rooms.

The fatal accident which occurred to Sam Caravelos in the mine operated by the Canadian Coal Consolidated, Limited, near Frank, was caused by Caravelos going into a place and attempting to brush out an accumulation of gas which was there, with a piece of brattice cloth.

The fatal accident which occurred to Archibald Laidlaw in the mines operated by the Pacific Pass Coal Fields, Limited, near Bickerdike, was caused by a fall of roof. It appears that Laidlaw, together with another man, had been sent to secure a piece of roof coal which showed a slip in it, and while doing so, the roof fell, killing Laidlaw.

The fatal accident which occurred to John Chezik at the mines operated by the Canadian Consolidated, Limited, was caused by Chezik taking hold of an electric wire which had been broken by a wind storm.

The fatal accident which occurred to Leon Seniuk in the No. 6 mine operated by the Department of Natural Resources of the Canadian Pacific Railway, near Lethbridge, was caused in connection with haulage. Seniuk was bringing a number of cars down an incline and failed to put sufficient sprags into the wheels, with the result that the cars ran away and caught him.

The fatal accident which occurred to Sam Wilson in the mine operated by the Hillcrest Collieries, Limited, near Hillcrest, was caused by Wilson going into a place which was fenced off owing to an accumulation of gas being present there. He apparently went into this place with the intention of having the gas removed. This is another case where it is probable that if the Pulmotor had been sent for immediately after the accident had occurred, according to the evidence given by the

doctor at the inquest, this man's life would have been saved. There appears to be no reason why the Pulmotor should not have been sent for.

The fatal accident which occurred to John Loftus in the mine operated by the Canada West Coal Company, near Taber, was caused by a fall of roof while deceased was mining the coal.

The fatal accident which occurred to Joe Bojdys in the mine operated by the Department of Natural Resources of the Canadian Pacific Railway near Bankhead, was caused by a timber being knocked out by a car which had become derailed. It appears that deceased was operating a compressed air locomotive at the time, when one of the cars became derailed, with the result that he was killed instantaneously.

There have also been thirty-three serious accidents below ground and five above ground, and fifty-two slight accidents below ground and six above ground.

The following table gives the number of tons mined per accident in the province from the years 1906 to 1912, inclusive:

SUMMARY TABLE SHOWING ACCIDENTS OCCURRING IN MINES DURING YEARS 1906 TO 1912 INCLUSIVE.

YEAR	OUTPUT	ACCIDENTS			TONS OF COAL MINED PER ACCIDENT		
		Fatal	Serious	Slight	Fatal	Serious	Slight
1906	1,385,000	10	11	20	138,500	125,909	69,250
1907	1,834,745	19	18	68	96,565	101,930	26,981
1908	1,845,000	11	38	13	167,727	48,552	141,923
1909	2,174,329	9	42	18	241,592	51,769	120,796
1910	3,036,757	61*	41	58	49,782*	71,067	52,357
1911	1,694,564	7	32	45	242,080	52,955	37,656
1912	3,446,349	21	38	58	164,111	90,693	59,419

* Including thirty-one deaths caused by Bellevue explosion.

TABLE SHOWING ACCIDENTS DURING 1912 CLASSIFIED ACCORDING TO DISTRICTS.

DISTRICT	OUTPUT	ACCIDENTS			TONS OF COAL MINED PER ACCIDENT		
		Fatal	Seri's	Slight	Fatal	Serious	Slight
Crow's Nest Pass	1,524,816	9	17	24	169,424	89,695	63,534
Lethbridge	760,687	3	13	13	253,562	58,514	58,514
Edmonton	633,883	3	4	9	211,294	158,470	70,431
Calgary	526,963	6	4	12	87,827	131,740	43,913

TABULATED LIST OF ACCIDENTS OCCURRING IN THE PROVINCE ABOVE
AND BELOW GROUND DURING THE YEAR 1912.

CAUSE	FATAL		SERIOUS		SLIGHT		TOTAL	
	Above	Below	Above	Below	Above	Below	Above	Below
Falls of coal	..	4	..	6	..	4	..	14
Falls of roof	..	3	..	8	..	6	..	17
Falling down chute	..	..	..	..	..	2	..	2
Haulage	1	4	..	14	2	16	3	34
Gas Explosions	..	..	..	..	..	3	..	3
Explosives	..	2	..	1	..	11	..	14
Coal-cutting machinery ..	..	..	..	..	..	1	..	1
Asphyxiation	..	3	..	..	..	..	..	3
Electrocution	1	..	..	..	..	..	1	..
Miscellaneous	3	..	5	4	4	9	12	13
Total	5	16	5	33	6	52	16	101

The following tables give the classification of accidents according to the district in which they occurred:

CROW'S NEST PASS.

CAUSE	FATAL		SERIOUS		SLIGHT	
	Above	Below	Above	Below	Above	Below
Falls of coal	..	3	..	5	..	3
Falls of roof	..	1	..	4	..	3
Falling down chute	..	..	..	..	..	2
Haulage	..	1	..	5	1	7
Explosives	..	..	..	..	..	3
Asphyxiation	..	3	..	..	..	..
Explosion of gas	..	..	..	..	..	1
Electrocution	1	..	..	..	..	..
Miscellaneous	..	..	1	2	1	3
Total	1	8	1	16	2	22

LETHBRIDGE.

CAUSE	FATAL		SERIOUS		SLIGHT	
	Above	Below	Above	Below	Above	Below
Falls of roof	..	1	..	3	..	2
Haulage	1	1	..	7	..	4
Explosives	..	..	..	..	..	2
Explosion of gas	..	..	..	..	..	2
Miscellaneous	..	..	2	1	..	3
Total	1	2	2	11	..	13

EDMONTON.

CAUSE	FATAL		SERIOUS		SLIGHT	
	Above	Below	Above	Below	Above	Below
Falls of coal	..	1	..	1	..	1
Haulage	..	1	..	2	..	2
Explosives	..	..	..	..	..	2
Coal-cutting machinery	..	..	..	..	..	1
Miscellaneous	1	..	1	..	1	2
Total	1	2	1	3	1	8

CALGARY.

CAUSE	FATAL		SERIOUS		SLIGHT	
	Above	Below	Above	Below	Above	Below
Falls of roof	..	1	..	1	..	1
Haulage	..	1	..	..	1	3
Explosives	..	2	..	1	..	4
Miscellaneous	2	..	1	1	2	1
Total	2	4	1	3	3	9

ACCIDENTS FROM EXPLOSIONS OF FIRE-DAMP OR COAL-DUST CLASSIFIED
ACCORDING TO CAUSE.

CAUSE OF EXPLOSION	Fatal Accidents		Non-Fatal Accidents Reported to Inspector	
	Number of separate accidents	Number of deaths	Number of separate accidents	Number of persons injured
Naked lights	..	..	1	1
Safety lamps	..	..	2	2

ACCIDENTS WITH EXPLOSIVES, CLASSIFIED ACCORDING TO THE NATURE
OF THE EXPLOSIVE.

NAME OF EXPLOSIVE	Fatal Accidents		Non-Fatal Accidents Reported to Inspector	
	Number of separate accidents	Number of deaths	Number of separate accidents	Number of persons injured
Black powder	..	..	5	5
Dynamite	..	..	1	1
Samsonite	2	2	2	3
Monobel	..	..	3	3
Total	2	2	11	12

ACCIDENTS WITH EXPLOSIVES CLASSIFIED ACCORDING TO THEIR CHARACTER OR CAUSE.

CHARACTER OR CAUSE	Fatal Accidents		Non-Fatal Accidents Reported to Inspectors	
	Number of separate accidents	Number of deaths	Number of separate accidents	Number of persons injured
Loose powder ignited by lamp....	..	..	2	2
Struck by coal from shot	..	..	4	4
While working near an unexploded remnant left by incomplete de- tonation of the charge.....	2	2	2	3
Premature ignition	..	..	3	3
Total	2	2	11	12

HAULAGE ACCIDENTS.

NATURE OF ACCIDENT	Fatal Accidents		Non-Fatal Accidents Reported to Inspectors	
	Number of separate accidents	Number of deaths	Number of separate accidents	Number of persons injured
While engaged on haulage opera- tions	4	4	25	25
While going to or from work.....	1	1	4	4
Miscellaneous	..	..	4	4
Total	5	5	33	33

ACCIDENTS CAUSED BY PERSONS BEING RUN OVER OR CRUSHED BY CARS.

NATURE OF ACCIDENT	Fatal Accidents		Non-Fatal Accidents Reported to Inspectors	
	Number of separate accidents	Number of deaths	Number of separate accidents	Number of persons injured
Tail rope haulage	2	2	4	4
Endless rope haulage	1	1	6	6
Compressed air locomotives	1	1	10	10
Horse	..	..	9	9
Hand	1	1	4	4
Total	5	5	33	33

The following is the list of the accidents which have occurred in the province during the year 1912:

DATE	MINE	NAME	AGE	OCCUPATION	REMARKS
Jan. 2	International Coal & Coke Co. Ltd.	J. Kilgannon	34	Miner	Fall of coal and top rock. Right arm crushed.
Jan. 3	Alberta Railway and Irrigation Co.	James Milling	17	Driver	Fell in front of mine car. Left leg fractured.
Jan. 3	Calgary Collieries, Ltd.	William Jones	29	Miner	Premature explosion of dynamite. Face cut and bruised.
Jan. 3	McGillivray Creek Coal & Coke Co.	Gordon Reiley	22	Driver	Caught between empty car and chute. Bruised back.
Jan. 4	Jasper Park Collieries, Ltd.	John Krosney	35	Miner	Injured by coal falling down chute. Legs bruised
Jan. 6	Royal Collieries, Ltd.	L. Bolero	38	Miner	Fall of rock. Back injured.
Jan. 13	Diamond Coal Co., Ltd.	John Gumbiz	23	Timberman's helper	Riding on car up incline when swivel broke. Fatal.
Jan. 16	International Coal & Coke Co. Ltd.	Robert Morgan	34	Miner	Fall of roof at working face. Right leg fractured.
Jan. 16	The Cardiff Collieries, Ltd.	J. McGregor	21	Driver	Jumping off mine car. Right ankle bruised.
Jan. 16	Royal Collieries, Ltd.	C. Rosa	22	Miner	Caught between mine cars and timbers. Left leg bruised.
Jan. 17	Western Coal & Coke Co.	Carl Smith	28	Rope rider	Caught between mine car and timbers. Left leg bruised.
Jan. 18	The Cardiff Collieries, Ltd.	Bert Reid	26	Haulage Attendant	Caught between car and timber. Collar bone broken.
Jan. 18	International Coal & Coke Co. Ltd.	Martin Setla	21	Chute loader	Struck by chute while riding on empty car. Left ankle injured.
Jan. 19	Alberta Railway & Irrigation Co.	Bill Ponich	28	Driver	Caught by mine car. Compound fracture of right leg.
Jan. 23	Round Hill Collieries, Ltd.	Thomas Englebretson	25	Miner	Caught by runaway mine car on slope. Compound fracture of leg.
Jan. 24	Royal Collieries, Ltd.	Thomas Longworth	29	Miner	Struck foot with coal pick. Foot bruised.
Jan. 27	Royal Collieries, Ltd.	A. Holoburd	23	Miner	Injured by fall of rock. Head and hands cut.

DATE	MINE	NAME	AGE	OCCUPATION	REMARKS
Jan. 31	Jasper Park Collieries, Ltd.	Campbell McPherson..	28	Miner	Fall of coal at working face. Leg fractured.
Jan. 31	Cardiff Collieries, Ltd.	Herbert Price	24	Miner	Caught by mine car and crushed against coal face. Fatal.
Feb. 6	West Canadian Collieries, Ltd. (Blairmore).	William Slack	52	Miner	Fall of rock at coal face. Body slightly bruised.
Feb. 7	Hillcrest Collieries, Ltd.	Dominick Marshall	24	Tracklayer	Caught between chute and car while riding on car. Bruised about pelvis.
Feb. 7	Lethbridge Collieries, Ltd.	Arthur Gore	21	Laborer	Caught between mine cars. Arm fractured.
Feb. 16	The Canadian Coal Consolidated Ltd.	John Ostapozak	35	Car-pusher	Caught between two cars. Leg injured.
Feb. 17	Diamond Coal Co. Ltd.	Vittorio Bignotti	25	Loader	Eye struck by small piece of coal while shearing. Left eye injured.
Feb. 19	West Canadian Collieries, Ltd., (Lille)	G. Lescuti	24	Miner	Struck by piece of rock from shot. Chest injured.
Feb. 24	West Canadian Collieries, Ltd. (Bellevue)..	Amour Mission	30	Miner	Falling down chute. Right ankle crushed and chest bruised.
Feb. 24	International Coal & Coke Co., Ltd.	Thomas Smith	34	Miner	Fall of rock at face. Compound fracture of bone of left foot.
Feb. 27	Western Coal & Coke Co.	Walter Smith	25	Rope rider	Crushed between car and side of roadway. Fingers crushed.
Mar. 4	Bankhead Mines, Ltd	Pete Balla	31	Miner	Caught between car and door frame. Hips squeezed and bruised.
Mar. 6	International Coal & Coke Co., Ltd.	M. Lajka	22	Chute loader	Car door fell on him while he was lifting derailed car. Left wrist broken.
Mar. 11	Royal Collieries, Ltd.	Charles Smith	45	Shift boss	Struck by haulage rope Leg fractured.
Mar. 15	The Canmore Coal Company, Ltd.	Paul Stansel	30	Miner	Slide of rock in gob. Left leg fractured, right hand lacerated.
Mar. 16	West Canadian Collieries, Ltd. (Bellevue)....	Saturnin Naroye	44	Miner	Fall of coal at face. Scalp wound, arm fractured and body bruised.

DATE	MINE	NAME	AGE	OCCUPATION	REMARKS
Mar. 20	The Canmore Coal Co., Ltd.	Sam O'akszy	19	Laborer	Premature explosion of unexploded portion of Samsonite powder. Fatal.
Mar. 20	The Canmore Coal Co., Ltd.	Emmanuel Maneglia ..	28	Laborer	Premature explosion of unexploded portion of Samsonite powder.
Mar. 20	The Canmore Coal Co., Ltd.	Tony Casali	38	Rock-miner	Several small cuts on back.
Mar. 28	International Coal & Coke Co., Ltd.	John Vuori	39	Miner	Several small cuts about head and face.
Apr. 4	West Canadian Collieries, Ltd. (Bellevue)	Sam Ranino	26	Timber packer ..	Fall of coal from roof. Back injured. Caught between mine cars. Leg bruised.
Apr. 9	Lethbridge Collieries, Ltd.	John Brauer	27	Machine runner ..	Lifting derailed machine. Back sprained.
Apr. 9	Lethbridge Collieries, Ltd.	John Soukut	28	Driver	Caught by mine car. Thigh bruised.
Apr. 12	Lethbridge Collieries, Ltd.	John Makerinko	21	Driver	Fell from moving mine car. Superficial scalp wounds.
Apr. 13	West Canadian Collieries, Ltd., (Bellevue)	Wm. A. Baughan ...	28	Mine laborer	Fall of coal while repairing main gangway. Fatal.
Apr. 14	Yellowhead Pass Coal & Coke Co., Ltd.	A. Irtansky	25	Track layer	Fell in front of mine car. Compound fracture of right leg.
Apr. 17	The Canadian Coal Consolidated, Ltd.	Gideon Derume	36	Shop master	Overbalanced himself while working on tipples. Leg fractured.
Apr. 19	West Canadian Collieries, Ltd. (Lille)	M. Comparino	33	Miner	Fall of coal while undercutting. Nose cut.
Apr. 24	International Coal & Coke Co., Ltd.	P. Clement	36	Miner	Fall of coal and rock. Sprained back and ribs.
Apr. 29	R. W. K. Cousins	Arthur Lewis	26	Miner	Piece of flying coal. Loss of eye.
	Bankhead Mines, Ltd.	Jos. Barker	47	Outside foreman.	Timber fell from railway car. Fractured skull. Fatal.
Apr. 30	McGillivray Creek Coal & Coke Co., Ltd.	Edward Barnes	34	Miner	Fall of rock from roof. Back injured, right ankle sprained.
May 3	Natural Resources Department (C.P.R. Bankhead)	Mike Domolewick	20	Coupler	Caught between bumpers of mine cars. Foot crushed.
May 8	West Canadian Collieries, Ltd. (Bellevue)	F. Bonacci	26	Miner	Fell off set of timber. Leg cut.

DATE	MINE	NAME	AGE	OCCUPATION	REMARKS
May 10	Lethbridge Collieries, Ltd.	Joe Popolvier	26	Driver	Caught by bumper of mine car. Right foot lacerated.
May 10	Natural Resources Department. (C.P.R. Lethbridge)	John Rohvei	44	Machine runner	Ignition of gas. Slightly burned on face and hands.
May 11	Natural Resources Department. (C.P.R. Lethbridge)	Steve Takacs	29	Coal loader	Premature ignition of black powder. Burned on face and hands.
May 17	The Cardiff Collieries, Ltd.	R Bernas	21	Loader	Foot struck with pick. Right foot cut.
May 18	McGillivray Creek Coal & Coke Co., Ltd.	Dominick Degano	31	Track layer	Crushed between two loaded cars. Fatal.
May 23	Natural Resources Department. (C.P.R. Bankhead)	Joe Sippett	22	Loader	Caught between mine cars. Finger crushed.
June 3	West Canadian Collieries, Ltd. (Belevue)	Amour Mission	30	Miner	Roof fell while setting post. Dislocation of left shoulder. Wound over eye.
June 4	Alberta Coal Mining Co., Ltd.	Caesar Bruno	35	Miner	Premature ignition of black powder. Shock from explosion.
June 8	West Canadian Collieries, Ltd. (Bellevue)	Albert Telepatti	30	Miner	Fall of coal while mining. Lacerated wound over right eye and apparent fracture of the base of skull.
June 8	West Canadian Collieries, Ltd. (Blairmore)	John Gates	27	Miner	Fall of roof while erecting timber. Internal injuries.
June 17	Natural Resources Department. (C.P.R. Lethbridge)	Mike Chychot	22	Section man	Swinging chain of steam shovel broke, left thigh crushed.
June 18	West Canadian Collieries, Ltd. (Blairmore)	Alfred Sonnier	32	Timber packer	Caught by nail while packing timber. Right arm injured.
June 28	Natural Resources Department. (C.P.R. Bankhead)	Mike Portskool	64	Surface laborer	Buried by slack in bin. Fatal.
July 9	Hillcrest Collieries Ltd.	Elias Letherland	30	Miner	Struck by flying coal from shot. Small flesh wound.
July 11	St. Albert Collieries Ltd.	Raymond Rockey	23	General laborer	Caught between cofferdam and platform. Fatal.
July 13	Hillcrest Collieries, Ltd.	Steve Bellibotsky	32	Miner	Platform on which he was working gave away. Fractured knee.
July 17	West Canadian Collieries, Ltd. (Bellevue)	Barney Iorio	31	Miner	Struck by lever of drilling machine. Right eye injured.

DATE	MINE	NAME	AGE	OCCUPATION	REMARKS
July	19 Royal Collieries, Ltd.	William Flechuck	29	Miner	Struck on eye by tamping bar. Eye injured.
Aug.	1 West Canadian Collieries, Ltd. (Bellevue)	C. Ollst	22	Motorman	Injured by motor running into mine car. Arm fractured.
Aug.	6 Natural Resources Department (C.P.R. Bankhead)	R. A. Raffaele	29	Miner	Fall of rock. Hips squeezed.
Aug.	7 Chinook Coal Co. Ltd.	Alexander Maluku	23	Loader	Fall of rock. Fractured leg.
Aug.	8 McGillivray Creek Coal & Coke Co.	Naukine Salvatore	20	Pit headman	Strumbled against mine car. Forehead cut.
Aug.	10 International Coal & Coke Co., Ltd.	V. Stalmans	16	Door boy	Riding in front of locomotive. In attempting to jump off, left ankle dislocated.
Aug.	12 The Canmore Coal Co. Ltd.	John Gaido	24	Helper	Struck unexploded remnant of powder. Hands and head injured.
Aug.	12 The Canmore Coal Co. Ltd.	Martin Targhetta	39	Miner	Struck unexploded remnant of powder. Fatal.
Aug.	16 Natural Resources Department (C.P.R. No. 3 Mine, Lethbridge)	Mirio Benedetti	35	Loader	Fall of roof. Left leg fractured.
Aug.	20 Natural Resources Department (C.P.R. Bankhead)	Goi Gioia	25	Laborer	Fell over timber. Nose fractured.
Aug.	21 Natural Resources Department (C.P.R. Bankhead)	John Hurvek	23	Fitter	Burned by pitch. Hands and face burned.
Aug.	21 West Canadian Collieries, Ltd. (Blairmore)	Steve Roveluck	31	Bratticeman	Fall of coal at face. Fatal.
Aug.	21 Mitford (Calgary) Collieries, Ltd.	William Pearson	52	Engineer	Fell while walking down slope. Fractured ribs.
Aug.	26 Natural Resources Department (C.P.R. No. 6 shaft, Lethbridge)	Andy Mihaluk	22	Driver	Caught by mine cars. Left leg fractured.
Sept.	9 The Canmore Coal Co. Ltd.	Mike Kangas	23	Miner	Knocked down chute by stone boulder at coal face. Fatal.
Sept.	9 Jasper Park Collieries, Ltd.	John James	26	Miner	Fall of coal from Pillar. Head and ribs bruised.
Sept.	10 Hillcrest Collieries, Ltd.	Franke Rose	29	Bratticeman	Fall of cap rock. Internal injuries.
Sept.	10 Hillcrest Collieries, Ltd.	George Johnston	24	Bratticeman helper	Fall of cap rock. Hip injured.

DATE	MINE	NAME	AGE	OCCUPATION	REMARKS
Sept. 16	The Leitch Collieries, Ltd.	Steve Komplin	27	Miner	Asphyxiated, through lack of ventilation. Fatal.
Sept. 17	McGillivray Creek Coal & Coke Co., Ltd.	Emile Gengembre	42	Miner	Fall of cap rock. Fatal.
Sept. 19	Natural Resources Department. (C.P.R. No. 6, Lethbridge)	T. Stephenson	28	Loader	Ignition of gas. Arms and neck burned.
Sept. 23	Natural Resources Department. (C.P.R. Bankhead)	Joseph Starr	29	Engineer	Bursting of guage glass on boiler. Eye injured.
Sept. 23	West Canadian Collieries, Ltd. (Blairmore)	John Robbir	34	Miner	Premature explosion of Monobel. Eyes slightly injured.
Sept. 24	The Cardiff Collieries, Ltd.	Tom Fray	20	Driver	Fell in front of mine cars. Right arm and back bruised.
Sept. 28	Natural Resources Department. (C.P.R. No. 6, Lethbridge)	Walter Emsley	35	Teamster	While driving wagon about one mile from mine, wagon overturned. Right leg fractured.
Oct. 2	The Canadian Coal Consolidated, Ltd.	Sam Caravelos	34	Miner	Asphyxiated by gas. Fatal. While attempting to brush out gas with brattice cloth.
Oct. 3	Royal Collieries, Ltd.	J. Basso	35	Miner	Burned by shot which he thought had miss-fired. Face injured.
Oct. 5	Canadian Coal Consolidated, Ltd.	Angelo Cervo	30	Timberman	Fell off plank laid across angle. Fractured rib.
Oct. 8	West Canadian Collieries, Ltd. (Blairmore)	Marchal Gaul	38	Miner	Fell into chute. Ribs fractured.
Oct. 8	McGillivray Creek Coal & Coke Co., Ltd.	E. Curridore	24	Laborer	Accidental release of ratchet windlass on tippie chute. Arm fractured.
Oct. 22	West Canadian Collieries, Ltd.	E. Wilan	26	Miner	Caught between mine cars. Chest and back injured.
Oct. 24	Western Coal & Coke Co.	David Muir	30	Fire boss	Ignition of gas. Right hand injured.
Oct. 31	Natural Resources Department. (C.P.R. No. 3, Lethbridge)	Frank Nagedly	19	Driver	Fell in front of loaded mine car. Left arm and shoulder injured.
Nov. 1	Natural Resources Department. (Bankhead)	T. Strogny	35	Timber packer	Piece of timber fell down manway. Leg fractured.

DATE	MINE	NAME	AGE	OCCUPATION	REMARKS
Nov. 6	The Pacific Pass Coal Fields, Ltd.	Archibald Laidlaw	42	Miner	Fall of coal. Fatal.
Nov. 6	Natural Resources Department. (C.P.R. No. 6, Lethbridge)	Leon Seniuk	28	Gripper	Caught by cars running down grade. Fatal.
Nov. 18	West Canadian Collieries, Ltd. (Bellevue) ..	S. Vandriesche	36	Timber packer ..	Fall of coal. Arm fractured.
Nov. 28	International Coal & Coke Co., Ltd.	C. Poluk	19	Chute loader	Caught between mine cars. Left thumb crushed.
Nov. 9	Canadian Coal Consolidated, Ltd.	John Chezlik	36	Lampman	Electrocuted by wire blown down during storm. Fatal.
Nov. 30	Hillcrest Collieries, Ltd.	Samuel Wilson	46	Bratticeman	Suffocated by gas. Fatal.
Dec. 6	The Canada West Coal Co., Ltd.	John Loftus	42	Miner	Fall of roof. Fatal.
Dec. 9	The Cardiff Collieries, Ltd.	Henry Pomerleau	18	Laborer	Struck by broken chain on chain block.
Dec. 9	The Cardiff Collieries, Ltd.	Joseph Paul	22	Laborer	Right leg fractured.
Dec. 23	The Cardiff Collieries, Ltd.	Mike Remmeggo	20	Miner	Struck by broken chain on chain block. Left foot injured.
Dec. 24	International Coal & Coke Co., Ltd.	M. Brennan	40	Miner	Ignition of black powder by open light. Face and hands injured.
Dec. 26	Natural Resources Department. (Bankhead)	Joe Bojdys	20	Motorman	Piece of rock fell knocking out prop. Right shoulder dislocated.
Dec. 26	Natural Resources Department. (Bankhead)	Joe Sikora	20	Switchman	While pushing a trip of cars, one car jumped off track and knocked out timber. Fatal.
Dec. 31	Natural Resources Department. (C.P.R. No. 6, Lethbridge)	Archie E. Tennant	17	Trapper	While pushing trip of cars, one car jumped off track and knocked out timber. Head injured.
Dec. 31	Natural Resources Department. (C.P.R. No. 6, Lethbridge)	Andrew Evans	25	Driver	Caught by mine car. Right foot crushed. Crushed against side of road by horse. Collar bone fractured.

EXAMINATIONS.

An examination for fire boss certificates was held at Frank on May 29th and 30th, at which 31 candidates presented themselves for examination, 18 of whom were successful. The regular examinations for mine managers, pit bosses and fire bosses, were held at Frank, Banff and Edmonton on September 11th, 12th, 13th and 14th. At the latter examinations, 108 candidates presented themselves for examination, 62 of whom passed, as follows: Managers, 28 sat for examination, 10 passed; pit bosses, 44 sat for examination, 28 passed; fire bosses, 36 sat for examination and 24 passed.

During the past year 121 pit boss provisional certificates and six fire boss provisional certificates were issued to different persons until they had an opportunity of obtaining certificates by examination.

The following are the questions set at the examinations held at Frank, Banff and Edmonton on September 11th, 12th, 13th and 14th, 1912:

MINE MANAGERS' EXAMINATION.

Paper No. 1.

Time—One and a half hours.

Candidates must obtain 70 per cent. of the allotted marks to pass.

COAL MINES ACT.

1. What are the provisions of The Coal Mines Act regarding—
 - (a) The plans of working mines?
 - (b) The plans of abandoned mines?
2. State the provisions of The Coal Mines Act regarding ventilation, and state what factors would influence your decision as to the adequacy of ventilation in a mine. (8)
3. A mine is being worked by naked lights, but it is found necessary to adopt the use of locked safety lamps. What changes will require to be made in the working of the mine? (8)
4. What report books, or other books of record are required by The Coal Mines Act and "Eight Hour Law" to be kept at a mine? Explain clearly the purpose for which each is used and what entries should be made in each. (12)
5. What briefly are the provisions of The Coal Mines Act with regard to checkweighmen? What are the duties of checkweighmen? (10)
6. What are the provisions of The Coal Mines Act bearing upon the following subjects:
 - (a) Fencing machinery?
 - (b) Safety valves and gauges for steam boilers?
 - (c) Cover overhead?
 - (d) Chains? (14)
7. State shortly the provisions of The Coal Mines Act as to shafts or outlets. (7)
8. What are a mine manager's duties in the event of a serious or fatal accident occurring in or about a mine? (14)

9. State shortly the requirements of The Coal Mines Act as to—
- (a) Approaching old workings;
 - (b) Examination and use of safety lamps;
 - (c) The use and handling of explosives in or about a mine.
- (18)

MINE MANAGERS' EXAMINATION.

Paper No. 2.

Time—Two and a half hours.

Candidates must obtain 70 per cent. of the allotted marks to pass.

GASES, SHOT-FIRING AND SAFETY LAMPS,

1. During an inspection of a longwall district, in which black powder is used as the blasting material, you find a small fire-damp cap in the return air leaving the last face. You also observe that the face is naturally wet but the haulage load is dry and dusty. What further observations would you make, and what action, if any, would you take? (8)

2. Whilst examining for gas near the roof your safety-lamp is extinguished without giving any of the characteristic indications of fire-damp, what inference would you draw, and what would be an approximate composition of the gas? (7)

3. Describe the type of safety-lamp you are familiar with and explain fully the principal features upon which the safety of the lamp depends. Describe fully the arrangements you would make on the surface and underground to safeguard the mine from any accident likely to be caused through the use of safety-lamps. (10)

4. What is the meaning of the expression "spontaneous combustion"? Enumerate the gases given off from an underground fire, and discuss the one you consider most dangerous. Describe the effect upon a man breathing a diluted mixture of this gas and air, and explain how you would proceed to detect small quantities of the same. (9)

5. A stone drift 500 yards long has to be driven rising 1 in 8. The strata are ordinary coal measures strata and rise 1 in 10 in the direction in which the drift is going. Fire-damp is given off in places, and some of the ground is rather weak. No water is given off. Describe clearly what precautions should be taken for the safety and efficiency of the work, quoting any General Rules which refer to the subject. (7)

6. Describe briefly the method of firing shots in mines by means of fuse, squibs and electricity respectively, and discuss their comparative merits in respect to safety. (10)

7. What is the formula for calculating the percentage of gas from the height of flame cap observed? What percentage of gas is indicated by a three-quarter inch cap? Describe the expansive properties of fire-damp when mixed with air and when ignition takes place. (9)

8. Explain fully the real dangers connected with—

- (a) The use of monobel in conjunction with black powder;
 - (b) Using fine and coarse powder mixed;
 - (c) Tamping shots with coal-dust.
- (8)

9. (a) What is meant by the "Relative Weight" of the different gases?
 (b) Give the relative weights of the different gases found in coal mines. (6)
10. (a) What effect does coal dust have on an explosion of fire-damp?
 (b) What effect does white-damp have?
 (c) What effect does black-damp have?
11. What is the composition of—
 (a) Black powder?
 (b) Monobel?
 (c) What gases are generated by each when exploded?
 (d) What is the composition of fuse, and what gases does it generate in burning? (9)
12. In what part of a mine is coal dust most likely to be found? What precautions should you take on an engine plane with an accumulation of coaldust where there was a fairly strong current and cars moving rapidly, and under what conditions should you allow blasting and what explosive should you use? (8)

MINE MANAGERS' EXAMINATION.

*Paper No. 3.**Time—Three and a half hours.*

Candidates must obtain 70 per cent. of the allotted marks to pass.

VENTILATION.

1. What would be the height of motive column for upcast and for down-cast air respectively, when the depth of each shaft is 300 feet and the temperature of the downcast shaft is 32 degrees F. and that of the upcast 48 degrees F. ?
2. If 10 horsepower is producing a circulation of 60,000 cubic feet of air per minute in a mine—
 (a) What is the water gauge?
 (b) What quantity of air and what water gauge will be produced in this mine when the horsepower is increased to 25 ? (10)
3. What is meant by the term "coefficient of friction" as used in connection with mine ventilation? Give an example showing how such coefficient is used. (7)
4. What should happen to the fan if the doors at the top of the upcast were suddenly opened? Would the fan stop, slow down or increase its speed? Give reasons. (5)
5. Two shafts 110 feet apart are to be sunk to a depth of 460 feet. Describe fully the plant and arrangements you would adopt for their ventilation while sinking. (9)
6. The return air of a mine shows by analysis $1\frac{3}{4}$ per cent. of fire-damp. The volume of air passing is 100,000 cubic feet per minute and the water gauge in the fan drift is $2\frac{1}{2}$ inches. Find—
 (a) The volume of air required to reduce the quantity of fire-damp to 1 per cent.;
 (b) The additional horsepower required from the fan to circulate the increased volume. (8)

7. If one ventilating fan is producing a current of 25,000 cubic feet of air per minute in a mine, what total quantity of air can be produced by the addition of another fan of the same dimensions and operated with equal power? (9)

8. Show how you would ventilate the workings on the accompanying plan having due regard to haulage, coal being wound at the downcast shaft only. Show by arrows the direction of the air currents, putting in the necessary stoppings, doors, brattices and lamp stations. (12)

9. Describe generally what you would consider a model ventilating plant for a mine employing 500 men underground on one shift, and sketch and describe the construction and action of the fan you would adopt. (10)

10. Describe fully the Fleuss Rescue Apparatus and illustrate your description with sketches. Discuss its value with reference to—

- (a) Saving life after an explosion in a mine; and
- (b) Fighting a mine fire on the main haulage road of a flat seam. (12)

1. (a) Describe the difference between the exhaust and forcing fan system of ventilation.
- (b) Which is to be preferred under certain conditions for the ventilation of coal mines?
- (c) Is the resistance any greater to be overcome in the use of the exhausting or forcing fan?
- (d) In increasing the velocity of the air current, or lengthening the distance the air has to travel through a mine, is the resistance increased; if so, why? (10)

MINE MANAGERS' EXAMINATION.

Paper No. 4.

Time—Three and a half hours.

Candidates must obtain 60 per cent. of the allotted marks to pass.

PRACTICAL WORK.

1. In a seam 9 feet thick having an inclination of 35 degrees, a section of pillars 1,500 feet on the level and 800 feet to the rise, has been left, the pillars being 40 feet on the level by 70 feet to the rise. The room consists of soft shale 9 feet thick, fiery, and gas lodges freely in the rooms. Sketch and describe how you would take out the pillars. (10)

2. Describe the general structures of a coal field in Alberta with which you are familiar and state the possibilities of future extensions, if any, with the difficulties likely to be encountered in the future working of such extensions. (10)

3. What is meant by the terms "Igneous" and "Aqueous" rocks and "Intrusive dyke"? (9)

4. Give a description of the machinery and all appliances necessary in sinking two shafts to a depth of 550 feet in moderately hard strata. When would you stop sinking to put in walling? What would guide you on this point? One of the shafts is to be used as an upcast and

the other as a downcast. The downcast shaft only to be used as a hoisting shaft and is to be large enough to allow an output of 1,200 tons per day to be hoisted. Give dimensions of each shaft. (12)

5. In timbering rooms in a pitching seam with a fair roof, how far apart would you place the timbers; if the roof was broken, describe and explain how they should be placed and how you would place a prop to carry the greatest load? (8)

6. (a) What dangers may be encountered in drawing pillars in a pitching seam?

(b) What dangers would arise from drawing pillars in a flat seam generating CH₄, which is being worked immediately under another seam separated by 65 feet of strata? (8)

7. Assume you had a property of 1,500 acres containing two seams of coal each 5 feet thick with 30 feet of strata intervening between them lying perfectly level, the depth to the top seam being 500 feet; describe—

(a) By what system would you work each seam?

(b) Say whether you would work one of these seams before the other and if so, which? Give reasons. (10)

8. What observations have you made concerning the dangers to be apprehended as far as safety to workmen is concerned—

(a) In working a pitching seam with a very strong roof?

(b) In working a flat seam with a tender roof? (10)

9. Do you consider a coal-cutting machine could be advantageously used for working a flat seam 4 feet 9 inches thick and having a tender roof; the pavement consisting of 18 inches of clay above a moderately hard rock? Give reasons for or against. (9)

10. Describe the best method for signalling which you are acquainted with—

(a) In sinking shafts;

(b) In working shafts. (7)

11. What are the chief factors leading to spontaneous combustion in coal mines? Name the principal gases given off from such fires and state fully how you would deal with an underground fire which had broken out in a section of pillars in a pitching seam. (7)

MINE MANAGERS' EXAMINATION.

Paper No. 5.

Time—Four hours.

Candidates must obtain 60 per cent. of the allotted marks to pass.

MACHINERY.

1. Describe the winding machinery, guides and safety appliances usually installed in an up-to-date coal mine, where the shaft is 650 feet deep and intended to raise an output of 1,200 tons in an eight-hour shift. (10)

2. Sketch and describe a suitable stop-block for use on a self-acting incline. For what purpose is such an appliance used? State

in your own words what rules you would make regarding the use of stop-block. (8)

3. What classes of ropes are most frequently used for winding purposes? Describe two methods which may be adopted to provide against excessive strains and shock. How long do you consider it safe to work winding ropes? (9)

4. A sump in a mine is 62 feet long, 8 feet wide and 9 feet deep, and full of water. How long will it take a 5-inch pump to empty this at a velocity of 100 feet per minute, if the leakage of the valves and resistance of the pump cause a loss of 20 per cent.? There are five 2-inch pipes running full and discharging water into the sump at a common velocity of 100 feet per minute. (7)

5. Give the breaking strain of a 11-16 cast steel wire rope of seven strands and nineteen wires to the strand. What load will break a white-oak timber 10 inches wide by 12 inches thick and 12 feet long, if the load be equally distributed along the length of the timber? (6)

6. How would you determine the proportionate areas of the cylinders and the proper point of cut-off in each, in a compound engine of two cylinders, the initial pressure being 65 pounds above the atmosphere and the final (terminal) pressure 10 pounds below the atmosphere? (6)

7. What power will be required to hoist an output of 800 tons of coal (per day) on an incline five-eighths of a mile long and rising 2 inches to the yard, extending from the inside parting to the shaft bottom, and return the empty cars, which weigh one-half as much as the load they carry; assuming the resistance of the cars to be 1-60 and the power required to move the rope equal to that required to move the cars. The speed of the rope is 3 miles per hour, and a working day 8 hours; the cars are moving 4-5 of the time. (12)

8. Describe—

(a) A feedwater heater;

(b) A steam trap;

(c) A superheater;

(d) An arrangement to reduce the quantity of black smoke. (8)

9. How would you support electric cables (a) in shafts, (b) in underground roadways? A dynamo is 100 yards from a house, the conductor has a resistance of .002 ohm per yard, and there will be one hundred and fifty 30-watt 100-volt lamps to be fed. What E.M.F. must the dynamo give? (6)

10. What are the special difficulties that are met with in sinking to the coal in the Edmonton coalfield? Describe and compare the different methods that have been used for overcoming these difficulties. (10)

11. What are the advantages and disadvantages of a belt driven fan? (6)

12. It is proposed to wind 1,000 tons per day of eight hours from a shaft 400 yards deep, the ropes being balanced. The ventilation required is 150,000 cubic feet per minute, at an estimated water-gauge of 3 inches. The power plant during the winding hours generates an average of 600 k.w. and supplies power for all purposes, other than

for winding and ventilating. Give the approximate brake horse-power of—

- (a) The winding engine;
- (b) The fan engine;
- (c) The generating engine;

and state what steam pressure, and what size, type and number of boilers you would adopt. (12)

MINE MANAGERS' EXAMINATION.

Paper No. 6.

Time—Three and a half hours.

Candidates must obtain 60 per cent. of the allotted marks to pass.

LEVELLING.

1. Draw a neat sketch with letters of reference, of the Dumpy level. (14)

2. State the causes which have operated to cause the displacement of the Y level by the Dumpy; in other words compare the Y and Dumpy levels. (9)

3. If the line of collimation in a Dumpy level was out of adjustment, how could you find two level points? (10)

4. Describe a levelling staff and explain its use. (10)

5. Fill in the following level notes, showing height of the instrument, elevation and grade, and state what is the average grade from Station 0 to Station 16. Stations are 100 feet apart. (20)

Station	B.S.	I.S.	F.S.	H.I.	Elevation	Grade	Remarks
O.B.M.	6.45						
1		3.85					
2		2.93					
3		1.84					
4		5.80					
5			3.15				
	7.20						
6		6.85					
7		4.35					
8		5.64					
9		2.10					
10			.80				
	4.86						
11		1.95					
12		5.65					
13		3.80					
14		1.60					
15		3.40					
16			2.90				

6. Plot the notes given in Question No. 5, on a vertical scale of 10 feet to the inch, marking on the number and elevation of each station.

Give the average grade from Station 0 to Station 16. Show grade by line drawn on profile. (25)

7. Describe different methods of levelling underground roadways, and say under what conditions you would use each. (12)

MINE MANAGERS' EXAMINATION.

Paper No. 7.

Time—Four hours.

Candidates must obtain 60 per cent. of the allotted marks to pass.

SURVEYING AND MAPPING.

1. Describe—
 - (a) A method of surveying with the loose needle;
 - (b) Plotting underground workings. (8)
2. What is meant by the term "Azimuth"?
3. State the method you would employ to accurately determine the vertical depth and also to plot the traverse section of an inclined shaft. (7)
4. Explain fully how you would make a fast needle survey underground. Illustrate your answer with a sketch plan of an underground traverse. (10)
5. Describe the operation of connecting the surface and underground surveys of a mine in a case where one shaft only is available. What method would you adopt and why? (8)
6. How would you lay down a short underground survey on the surface starting from the shaft? If the ground was steep, how would you lay off the lengths of the bearings? (10)
7. How should you proceed in plotting additional underground workings on an old plan? (7)
8. What is the magnetic meridian? How is it found and what means should you adopt to test the accuracy of the meridian line on a colliery plan? (9)

9. Calculate by sines and cosines the bearing and length of the closing line of the following traverse:

<i>Station.</i>	<i>Bearing.</i>	<i>Distance.</i>
0 to 1.....	N 43 degs. 18 mins. E.....	145 feet
1 to 2.....	S 62 " 25 " E.....	122 "
2 to 3.....	S 72 " 43 " W.....	93 "
3 to 4.....	S 69 " 55 " E.....	232 "
4 to 5.....	S 8 " 15 " W.....	173 "
5 to 6.....	N 81 " 10 " W.....	141 "
6 to 7.....	S 3 " 05 " W.....	128 "
7 to 8.....	S 43 " 18 " W.....	136 "
8 to 9.....	N 9 " 08 " E.....	285 " (15)

10. Plot the traverse given in Question 9, on a scale of 100 feet to one inch, and draw the closing line from Station 0 to Station 9. (20)

PIT BOSS EXAMINATION.

*Paper No. 1.**Time—One and a half hours.*

Candidates must obtain 60 per cent. of the allotted marks to pass.

COAL MINES ACT.

1. State in your own words what are the requirements of The Coal Mines Act, relating to the inspection of machinery (9)
2. State fully the provisions of The Coal Mines Act regarding manholes on underground roads. (12)
3. State fully the requirements of The Coal Mines Act with reference to ventilation of mines. (10)
4. State fully the provisions of The Coal Mines Act relating to the employment of persons in or about mines. (10)
5. What are the provisions of The Coal Mines Act relative to the use and care of explosives in mines. What steps would you take to enforce these provisions, or to detect persons who are violating them? (14)
6. When would you consider safety lamps necessary in order to comply with the provisions of The Coal Mines Act? (11)
7. State fully the provisions of The Coal Mines Act as to the inspection of mines—
 - (a) Before work is commenced;
 - (b) During working hours;
 - (c) By employees of the mine. (12)
8. Under what conditions does The Coal Mines Act allow a mine to be operated by a single shaft? (14)
9. What are the provisions of The Coal Mines Act regarding the appointment of stations. (8)

 PIT BOSS EXAMINATION.
*Paper No. 2.**Time—Two and a half hours.*

Candidates must obtain 60 per cent. of the allotted marks to pass.

VENTILATION, SHOT-FIRING AND SAFETY LAMPS.

1. Describe with sketches the best type of safety lamp you know for ordinary miners' use. To what points would you devote special attention in the selection of a safety lamp. (11)
2. Explain how coal-dust explosions may be brought about, and state what steps you would take to prevent them. (7)
3. Explain what conditions may cause a shot to hang fire—
 - (a) Where fuse is used for blasting;
 - (b) Where an electric battery is used.
 Describe two methods of firing shots. Which do you prefer and why? (9)

4. Show how you would ventilate the workings on the accompanying plan, having due regard to haulage. The coal is wound at the down-cast shaft only. Show by arrows the direction of the air current, putting in the necessary doors, brattices, etc. (10)

5. (a) Name and describe the explosive gases usually found in coal mines.
 (b) Under what conditions may they become explosive and non-explosive?
 (c) How are they generated in mines?
 (d) Where are they usually found, and how can they be expelled from the workings?
 (e) What effect have these gases on the health and safety of the workmen? (12)

6. What are the causes of blown-out shots, and what are the dangers arising therefrom? (5)

7. Describe how you would measure the quantity of air passing along an airway. Of two airways, one 7 feet wide and 6 feet high, the other 14 feet wide and 3 feet high, which will pass the greater quantity of air, other conditions being equal? Give reasons. (6)

8. What instruments would you use to properly determine the condition, volume and temperature of an air current in a mine? State fully the principle and action of each. (7)

9. What are the chief points which require immediate attention when the ventilation of a mine is reversed? (8)

10. 80,000 cubic feet of air per minute are circulating through a mine with a water gauge of 2 inches. What quantity will be circulated with a water gauge of 3 inches. (10)

11. What dangers have to be guarded against in a mine where the ventilating current is produced by means of a furnace? (7)

12. Discuss the advantages and disadvantages of using black powder and monobel respectively for blasting in coal. (8)

PIT BOSS EXAMINATION.

Paper No. 3.

Time—Three and a half hours.

Candidates must obtain 50 per cent. of the allotted marks to pass.

PRACTICAL WORK.

1. To what causes are accidents through falls of roof and sides attributed, and what precautions would you adopt to guard against them? (8)

2. Describe very fully the principle and action of the Fleuss Rescue Apparatus. (11)

3. Describe briefly several of the irregularities which are encountered in coal seams in the Crow's Nest Pass district. (6)

4. Describe with sketches the different methods of securing a main haulage road and pit bottom respectively. (10)

5. Describe briefly the two principle methods of working pitching seams and give the conditions suitable to each. (12)

6. Describe fully how you would proceed to fix a walling crib or curb in bad ground, and state what precautions you would take. (9)

7. Do you consider coal-cutting machines of the rotary type could be advantageously used for working a flat seam 4 feet 3 inches thick, with a moderately good roof, the floor consisting of 18 inches of fire-clay above a moderately hard parting? Give briefly your reasons for or against. (8)

8. Describe and illustrate some of the causes and effects of creep on the main roadway of a mine. (10)

9. (a) What is meant by initial explosion?

(b) If you were in charge of a mine where the old workings had caved in and filled up with gas, what precautions would you take to prevent an explosion?

(c) What causes might lead to an explosion in this case?

(10)

10. Describe fully how you would operate a flat seam of coal 5 feet 9 inches thick, with a soft fire-clay pavement, and a moderately hard roof. (9)

11. Show by sketches, arrangements for air crossings, either over or under and give your views generally with reference to them. (7)

PIT BOSS EXAMINATION.

Paper No. 4.

Time—Three and a half hours.

Candidates must obtain 50 per cent. of the allotted marks to pass.

MACHINERY.

1. Why is it necessary in deep shafts to counterbalance a hoisting rope? Describe briefly one method of doing this. (7)

2. Give a short description with sketches showing how you would conduct an endless haulage rope around quick curves. (7)

3. How would you ascertain the horsepower of a dynamo? (6)

4. Describe with a sketch the principle of the force pump, stating the limits under which it will work most satisfactorily. (9)

5. In a single acting force pump, the diameter of the plunger is 3 inches and the stroke is 12 inches. If the plunger makes 100 strokes per minute, calculate how many gallons of water will be delivered per hour. (10)

6. Describe the principle and action of the syphon, and state under what circumstances it may be beneficially applied for conveying water in mines. Give a sketch showing its application. (10)

7. Explain the principle and action of—

(a) The thermometer;

(b) The barometer;

(c) The hygrometer.

Say for what purpose each is used in connection with mining.

(9)

8. If a cross-bar 12 inches in diameter and 8 feet between notches carries a certain load, what should be the diameter of a cross-bar 14 feet

between notches to bear the same load? (with the same degree of safety.) (7)

9. Give specifically your reasons for preferring a main haulage engine being placed at the surface or underground—

(a) Where steam power is used;

(b) Where electric power is used. (8)

10. Describe the best driving pulley for endless rope haulage which you are acquainted with. (9)

11. What is the horsepower of an engine having a 28 inch stroke? The diameter of cylinder is 12 inches and effective steam pressure 80 pounds per square inch. (8)

12. A quantity of water which necessitates an 8-inch rising main has to be pumped up a shaft 200 yards deep. State the respective conditions under which you would use cast iron and steel pipes. How would you support the pipes in a shaft having wire conductors and what precautions would you take in replacing a broken pipe near the bottom of the shaft? (10)

PIT BOSS EXAMINATION.

Paper No. 5.

Time—Four hours.

Candidates must obtain 50 per cent. of the allotted marks to pass.

SURVEYING.

1. Describe fully with dimensioned sketch, the kind of mine car you consider to be best adapted for use in mines in the Crow's Nest Pass district. (12)

2. What steps would you take in order to comply with the provisions of The Coal Mines Act with regard to the plans of an abandoned mine? (9)

3. Plot the following survey to a scale of 100 feet to the inch:

<i>Station.</i>	<i>Bearing.</i>	<i>Distance.</i>
1 to 2.....	S 20 degs. 40 mins. E.....	143 feet
2 to 3.....	S 78 " 15 " E.....	114 "
3 to 4.....	S 5 " 40 " E.....	222 "
4 to 5.....	N 72 " 20 " W.....	192 "
5 to 6.....	S 40 " 35 " W.....	162 "
6 to 7.....	N 38 " 50 " W.....	288 " (20)

4. Give the bearing and length of the closing line from station 7 to station 1, of the survey given in Question No. 3. (12)

5. Mention briefly the method you would adopt to secure accuracy when plotting workings on the plan of a mine on which are shown workings closed twenty years previously. (10)

6. Name and describe the instruments used in connection with levelling roadways underground. State the different methods employed in such levelling and say under what conditions you would use each. (11)

7. Describe a method of surveying and plotting underground workings. (10)

8. What are the advantages of keeping plans of mines? How often ought a mine to be surveyed and the mine plans brought up to date. (8)

9. The dimensions of an airway are 6 feet high by 8 feet wide, by 894 feet long and the velocity of the air is 225 feet per minute; what quantity of air is passing per minute and what is the rubbing surface of the airway? (8)

FIRE BOSS EXAMINATION.

Paper No. 1.

Time—One and a half hours.

Candidates must obtain 60 per cent. of the allotted marks to pass.

COAL MINES ACT.

1. What are the qualifications required by The Coal Mines Act before a person can be allowed to act as fire boss? (9)
2. State fully the provisions of The Coal Mines Act governing safety lamps. (12)
3. State the conditions under which it would be necessary to withdraw workmen from a mine in order to comply with The Coal Mines Act. (10)
4. State fully what action you would take before firing shots in a mine generating fire-damp. (12)
5. What are the provisions of The Coal Mines Act relating to the care and handling of explosives? (14)
6. State briefly how you would proceed to make a thorough examination of a mine as fire boss; stating what you consider the most essential features to be noted so far as the safe working of the mine is concerned. (12)
7. What are the requirements of The Coal Mines Act relating to manholes on underground roadways? (11)
8. What are the requirements of The Coal Mines Act regarding—
 (a) A supply of timber?
 (b) Appointment of stations? (10)
9. What are the provisions of The Coal Mines Act relating to the inspection of mines, both before and during work? (10)

FIRE BOSS EXAMINATION.

Paper No. 2.

Time—Two hours.

Candidates must obtain 60 per cent. of the allotted marks to pass.

VENTILATION AND SAFETY LAMPS.

1. What is meant by splitting the air current in a mine, and what effect has it upon the total volume of air in circulation? (8)
2. A volume of 22,000 cubic feet of air per minute is passing along an airway 6 feet high by 8 feet wide; what is the velocity of the air in feet per minute? (7)

3. Describe fully the anemometer and thermometer, and say for what purpose each is used in connection with mine ventilation. (10)
4. Describe with sketch, some form of safety lamp which you consider most suitable for the use of miners. Discuss the advantages and disadvantages of having safety lamps fitted with internal ignitors. (12)
5. What causes are likely to lead to explosions in mines, and state fully what precautions you would take to prevent them? (8)
6. Discuss the advantages and disadvantages of having open lights in mines, and say what dangers are likely to arise from their use. (9)
7. In a mine with an output of 1,200 tons per day, the average daily output per man is $3\frac{1}{2}$ tons; what is the minimum quantity of air per minute you would have circulating around the mine? (8)
8. What is meant by "Natural Ventilation"? Explain fully the principle of natural ventilation and state its advantages and disadvantages as compared with artificial ventilation. (10)
9. Explain the difference between the forcing fan and exhausting fan system of ventilation, and state under what circumstances you would adopt one in preference to the other. (9)
10. Describe fully the construction of a regulator, and say for what purpose it is used. (10)
11. Explain fully how you would clear out an accumulation in a narrow heading of—
 - (a) Fire-damp;
 - (b) Black-damp. (9)

FIRE BOSS EXAMINATION.

Paper No. 3.

Time—One and a half hours.

Candidates must obtain 50 per cent. of the allotted marks to pass.

GASES AND SHOT-FIRING.

1. What are the chief noxious gases met with in coal mines? In what percentage is each dangerous to human life, and how would you test for the presence of each in a mine? (11)
2. Describe briefly two methods of firing shots. Give the advantages and disadvantages of each. (8)
3. What are the circumstances that may cause a blown-out shot? State the dangers that may occur from blown-out shots and what precautions you would take to prevent this. (10)
4. Under what circumstances do you consider a high explosive to be preferable to ordinary black powder for blasting? (8)
5. Under what conditions may coal-dust become a dangerous agent in coal mines? (10)
6. Discuss fully the effect of various percentages of gas on the flame of an ordinary safety lamp, stating the best methods you know of testing for gas. (9)

7. Explain under what circumstances may you have an explosion in a mine where the flame of the safety lamp does not show any indications of the presence of fire-damp. (9)
8. What is meant by "Diffusion of Gases" and what effect does this have on the ventilation of a mine? (9)
9. Explain fully from what sources CH_4 is generated in mines in the lignite field, and what steps you would take to prevent an accumulation of this gas. (7)
10. Describe some form of electric battery for shot-firing, and discuss its advantages and disadvantages. (8)
11. Following a low barometer at a mine in course of development, gas exuded to such an extent as to fill the working places out to the main intake. To what causes would you attribute such an occurrence, and what steps would you take to restore adequate ventilation in the mine? (11)

FIRE BOSS EXAMINATION.

Paper No. 4.

Time—Two and a half hours.

Candidates must obtain 50 per cent. of the allotted marks to pass.

PRACTICAL WORK.

1. What precautions would you take to overcome the dangers to be apprehended as far as safety to workmen is concerned, in working a coal seam with a very strong roof in longwall, and stoop and room workings, respectively? (9)
2. What arrangements would you make on underground roads where the haulage is done by means of horses, to insure the safety of drivers and all persons employed in the mine? (7)
3. Describe the principle and action of the Fleuss Mine Rescue Apparatus, and state what experience you have had with it. (12)
4. Describe with sketches two methods of extracting pillars on a seam 12 feet thick and pitching at an angle of 38 degrees, with a fairly good roof. Say which method you prefer and give reasons for your preference. (10)
5. Describe fully the method of boring and the tools required, when approaching old workings likely to contain large accumulations of water and gas. (8)
6. Describe with sketches how you would work a flat seam of coal 4 feet 3 inches thick with soft roof and pavement. (11)
7. Sketch and describe the various systems of timbering a main road with which you are acquainted, and briefly explain the circumstances suitable to each. (7)
8. A number of underground fires have occurred within recent years in mines in the Lethbridge district. Describe fully how in your opinion these fires may be caused and what precautions you would take to prevent them. (8)
9. Discuss the advantages and disadvantages of firing shots in the lignite field by means of squibs and fuse respectively. (7)

10. If a seam of coal dips to the south and a down-throw fault is met in driving an east level, in which direction should the road be turned to again reach the coal? (6)

11. Describe with sketches some method of timbering a working place on a 14-foot seam which is pitching at an inclination of 40 degrees. (6)

12. Sketch and describe with dimensions a ventilation door which you would erect on the main haulage road of a flat seam. (9)

WAGES.

The scale of wages paid in the province during the year 1912 remains the same as it was at the end of the year 1911, and is as follows:

Outside Wages.

Fire bosses	\$110.00 to \$115.00 per month.			
Bottom man	\$2.89 per day, 10 hrs.			
Slate pickers (boys)	1.37 "	"	10 "	
Slate pickers (men)	2.47 "	"	10 "	
Car oilers (men)	2.47 "	"	10 "	
Car oilers (boys)	1.65 "	"	10 "	
Tally boys	1.37 "	"	10 "	
Teamsters	2.89 "	"	10 "	
Blacksmith	3.85 "	"	10 "	
Blacksmith's helpers	2.90 "	"	10 "	
Power-house engineers	3.85 "	"	12 "	
Power-house engineers	3.40 "	"	8 "	
Fan-men	2.90 "	"	12 "	
Hoisting engineers	3.20 "	"	8 "	
Hoisting engineers	3.78 "	"	10 "	
Hoisting engineers	4.40 "	"	12 "	
Tail rope engineers	3.63 "	"	8 "	
Tail rope engineers	3.85 "	"	10 "	
Endless rope engineers	3.30 "	"	10 "	
Box-car loader engineer	3.40 "	"	10 "	
Tipple engineer	3.40 "	"	10 "	
Screen engine tender	2.65 "	"	10 "	
Locomotive engineer	3.40 "	"	10 "	
Locomotive switchman	3.00 "	"	10 "	
Fireman	2.89 "	"	8 "	
Fireman	3.85 "	"	12 "	
Fireman's helper	2.65 "	"	10 "	
Railway-car helper	2.60 "	"	10 "	
Tipple dumper (man)	2.89 "	"	10 "	
Tipple dumper's helpers	2.64 "	"	10 "	
Tipple dumper (boy)	1.65 "	"	10 "	
Top cages	2.64 "	"	10 "	
Car repairer	3.40 "	"	10 "	
Car repairer's helper	2.90 "	"	10 "	
Breaker engineer	3.40 "	"	10 "	
Fan fireman	3.40 "	"	12 "	
Lampman (depending upon number of lamps and skill of man)	\$2.47 to 2.89 "	"	8 "	
Lampman (depending upon number of lamps and skill of man)....)	\$2.47 to 3.40 "	"	12 "	
Machinists	\$3.40 to 3.85 "	"	10 "	
Machinist's helper	2.90 "	"	10 "	
Ashman	2.50 "	"	10 "	
Ashman	2.89 "	"	12 "	
Wiper (man)	2.89 "	"	12 "	
Coupler (man)	2.47 "	"	15 "	
Coupler (boy)	1.65 "	"	10 "	
Breaker oiler	2.89 "	"	11 "	

DEPARTMENT OF PUBLIC WORKS

Washer or tipple oiler	\$2.89	per day	11 hrs
Breaker picker boss	2.89	"	" 10 "
Timber framer	3.40	"	" 10 "
Timber sawyer	2.64	"	" 10 "
Box-car shoveller	2.89	"	" 10 "
Breaker platform boss	2.89	"	" 10 "
Breaker platform men	2.60	"	" 10 "
Breaker screen men	2.47	"	" 10 "
Rock bank men	2.47	"	" 10 "
Dirt bank men	2.47	"	" 10 "
Finisher after box-car loader	2.47	"	" 10 "
All other outdoor labour	2.47	"	" 10 "

Bee Hive Coke Ovens

Levelling and drawing (6 1-2 ton charge) per oven....	\$1.00
Levelling and drawing (5 ton charge), per oven	.80
Loading into box or open cars (over 200 tons per month), per ton	.17
Loading into box or open cars (less than 200 tons per month), per ton	.16
Seam locomotive engineer	\$3.40 per day 10 hrs.
Motorman	3.18 " " 10 "
Larryman	2.47 " " 10 "
Plasterers	2.47 " " 10 "
Carters and cleaners	2.47 " " 10 "
All other labor	2.47 " " 10 "

Belgian Coke Ovens.

Ram engine man	\$3.40 per day 10 hrs.
Chargers	2.89 " " 10 "
Clayers	2.89 " " 10 "
Drawers	2.89 " " 10 "
Loaders	2.60 " " 10 "

Briquette Plant

Engineer	\$3.86 per day 12 hrs.
Briquetter	3.97 " " 12 "
Briquetter's helper	3.40 " " 12 "
Tar melter	2.89 " " 12 "
Labourers	2.89 " " 12 "

Inside Wages.

Spotlighter	\$3.30 per day 8 hrs.
Bratticeman	3.30 " " 8 "
Bratticeman's helper	2.75 " " 8 "
Timberman	3.30 " " 8 "
Timberman's helper	3.75 " " 8 "
Tracklayers	3.30 " " 8 "
Tracklayer's helper	2.75 " " 8 "
Motorman	3.05 " " 8 "
Motorman's helper	2.75 " " 8 "
Locomotive engineer	3.05 " " 8 "
Locomotive switchman	2.75 " " 8 "
Drivers	3.03 " " 8 "
Drivers (wet places)	3.30 " " 8 "
Drivers (spike team)	3.50 " " 8 "
Couplers (men)	2.75 " " 8 "
Couplers (boys)	1.65 " " 8 "
Switch boys	\$1.37 to 1.65 " " 8 "
Door boys	1.10 " " 8 "
Rope riders	3.03 " " 8 "

Main and tail rope riders	\$3.30	per day	8 hrs.
Pushers	2.75	" "	8 "
Buckers	2.75	" "	8 "
Loaders	2.75	" "	8 "
Miners	3.30	" "	8 "
Miners (wet places)	3.75	" "	8 "
Rock miners	3.75	" "	8 "
Timber handlers	3.03	" "	8 "
Laborers	2.75	" "	8 "
Cagers, slope and incline	2.75	" "	8 "
Cagers, shaft	3.30	" "	8 "
Machine men	3.75	" "	8 "
Machine men's helper	3.30	" "	8 "
Pumpmen	2.75	" "	8 "
Pumpmen (Dept. Nat. Res. C.P.R.)..	3.20	" "	8 "
Hoistmen	\$3.03 to 3.30	" "	8 "
Drivers (boys)	\$1.65 to 2.75	" "	8 "
Grippers	2.75	" "	8 "
Grippers (boys)	\$1.65 to 1.75	" "	8 "
Pipe fitters' helpers	2.75	" "	8 "
Pit carriers	\$1.37 to 2.75	" "	8 "
Clutchmen	3.30	" "	8 "
Rollermen	2.75	" "	8 "
Miners on contract average \$350 to	6.00	" "	8 "

Although the output of coal during the year 1912 shows an increase of 409,592 tons over the year 1910, this increase would have been much greater if the industry had not been hampered considerably by the lack of railway cars, particularly during the early part of the year. A number of the mines in the Crow's Nest Pass and Lethbridge districts only worked an average of 8 or 9 days per month for several months. If a sufficient supply of cars is obtained during the present year, a very much increased output may be expected.

I have the honour to be, Sir

Your obedient servant,

JOHN T. STIRLING,

Provincial Inspector of Mines.

THE STEAM BOILERS BRANCH

Inside Staff—	{ One Clerk in charge. One Chief Inspector. One Stenographer.
Outside Staff—	{ Four District Inspectors. Three Assistant Inspectors.

The returns for the year ending December 31st, 1912, covering work in connection with the Steam Boilers Branch show a very marked increase over the corresponding period last year, and the inspectors' reports indicate that at the close of a very busy season there yet remain portions of each district not fully covered by inspection. Special efforts are made, however, to visit all stationary plants regularly once every year,

and oftener in some instances, in order to determine whether repairs ordered have been attended to and satisfactorily completed.

Every endeavour is made by the inspectors to inspect each and every boiler in their individual district at least once a year, but with the staff available at the present time, and considering the extent of territory to be covered, this is found to be practically impossible.

Although bad roads, requests for special inspections, monthly examinations of candidates for engineers' certificates, etc., have interfered somewhat with the routine of inspection, there have been 1,590 inspection certificates issued for boilers during the year, while 71 other boilers were inspected but no certificates issued therefor, pending completion of repairs. Sixteen boilers in all were condemned.

While the great majority of steam users in the province recognise the advantage of careful and efficient operation of their plants, some few owners are still met with, who, through lack of interest and want of knowledge necessary for the proper upkeep of their plants, suffer considerable loss of fuel and boiler efficiency, also output, through defective settings, scale in boilers, faulty steam pipes, etc.

During the months of March and April, regular advertised examinations for engineers were held at 62 points throughout the province, at which a total of 1,354 candidates presented themselves for examination. In addition to those advertised and held during the spring, there have been regular monthly examinations held at the respective headquarters of each district inspector, and certificates were issued to those successful in passing for the various classes as follows: First class, 13; second-class, 56; third-class, 421, traction final, 139; fireman's final, 4; provisional, 751; renewal of provisionals, 121; second provisional, 86.

Two hundred and eighty-four permits have also been granted to owners in accordance with the provisions contained in section 34 of The Boilers Act.

Seven registered engineers had their certificates suspended for neglect of duty, and two others had their certificates cancelled, they having been found under the influence of liquor while on duty.

Convictions were obtained in 19 cases of prosecution for violation of the Act.

An innovation was made during the year by the purchase of three Ford single seated "Roadster" automobiles which were assigned to districts most suitable for this mode of travel, the teams previously used being dispensed with. The superiority of these autos over the teams has been amply demonstrated during the six months in which they have been operated, a total of 11,000 miles having been covered at a cost of five and a half cents per car mile. The quicker means of travel provided in this way has resulted in a considerable saving of time when moving from point to point, and a consequent increase in the number of boilers inspected throughout the districts were operated.

Justifiable allusion may again be made here to the regulations which now have such an important bearing on all matters relating to the construction of boilers intended for operation in this province. Continued satisfaction with the results obtained from their application is

heard expressed on every hand, both from the manufacturers and the purchasers of boilers, and it is interesting to note, so widely have they become known and appreciated, that almost every mail brings requests for copies, such requests emanating from Great Britain, Panama, almost every state in the Union to the South, and even from Tokio, Japan. In some instances it has been mentioned that copies are to be used specifically as a basis on which to formulate similar data, and for like purposes as applied here.

Twenty-seven per cent. of the total number of Inspection Certificates issued during the year covered new boilers built to Alberta regulations, a similar percentage to that reported last year.

The Chief Inspector appends an interesting report, one item therein being particularly worthy of notice, as showing that at the present time there is some 150,000 boiler horsepower in the province under the jurisdiction of this branch.

The names and addresses of the Chief, District and Assistant Inspectors are given below:

F. W. Hobson	Edmonton.
Jos. Buxton	Calgary.
David Fraser	Edmonton.
N. Marshall	Lethbridge.
W. D. Watson	Red Deer.
F. P. Poole	Edmonton.
E. S. Hodges	Calgary.
W. Gray	Lethbridge.

A consolidated summary, compiled from the Inspectors' reports, showing the total number of defects found in boilers examined during the year, follows:

DEFECTS IN	Hor. Tub.	Hor. Fur.	Ret. Tub.	Loco. F box	Vert. Tub.	Water Tube	Total
Shell and drum	18	4	10	9	6	11	58
Front tube sheet	2	..	..	31	..	..	33
Back tube sheet	..	1	..	13	..	1	15
Top tube sheet	2	..	1	4	..	..	7
Bottom tube sheet	..	..	..	25	2	..	27
Firebox side sheet (inside)..	..	..	..	52	2	..	54
Firebox side sheet (outside)..	..	..	..	27	..	..	27
Crown sheet	..	..	7	116	2	..	125
Saddle sheet	..	..	..	..	..	..	..
Inside W.B. sheet	..	..	..	16	..	..	16
Outside W.B. sheet	..	..	..	14	..	..	14
Back sheet	..	..	..	6	..	..	6
Face plate	..	..	..	10	..	..	10
Throat sheet	..	..	..	3	..	..	3
Foundation and door rings..	..	..	..	9	..	..	9
Stay bolts	..	..	3	192	..	..	195
Crown stays	..	..	1	38	..	..	39
Longl. stays	3	..	1	1	..	..	5
Leaking seams	11	..	1	4	6	..	22
Rivets	..	5	..	..	2	..	7
Main flues	..	..	..	..	..	..	..
Tubes	9	..	3	36	22	10	80
Hand holes and man holes ...	6	5	1	22	47	..	81
Studs and bracket (attach)..	..	..	2	30	2	..	34
Safety valves	15	1	2	102	30	..	150
Steam gauges	19	6	4	95	9	1	134
Water gauge fittings	35	5	3	85	23	2	153
Blow down	33	3	3	98	37	7	181
Fusible plug	20	8	3	53	3	5	92
Other fittings	..	..	..	..	..	..	..
Settings	21	23	1	1	..	..	46
Heavy scale	32	..	1	41	1	2	77
Feed arrangement	21	..	..	..	..	..	21
Steam piping and supports ..	13	..	..	1	..	2	16
Hand railing for fly wheels Switchboards, etc.	4	..	..	..	..	..	4
Total	264	61	47	1134	194	41	1741

A schedule of certificates issued and fees collected, inspectors' annual reports, list of manufacturers and list of final certificates issued to December 31st, are appended:

	1911	1912
Number of certificates issued for boilers inspected	1,311	1,590
Number of advertised examinations for engineers held	58	62
Number of first class certificates issued	7	13
Number of second class certificates issued	49	56
Number of third class certificates issued	428	421
Number of traction final certificates issued....	....	139
Number of fireman's final certificates issued..	....	4
Number of provisional certificates issued	698	751
Number of second provisional certificates issued	89	86
Number of renewals of provisional certificates..	86	121
Number of permits issued	184	284

FEES COLLECTED.

	1911	1912
For inspection of boilers	\$ 6,426.00	\$ 7,898.00
For special inspection of boilers	36.05	438.66
For examination of engineers for final certificates	2,523.00	3,308.00
For provisional certificates	3,517.00	3,755.00
For second provisional certificates	455.00	410.00
For renewal of provisional certificates....	215.00	303.00
For permits	920.00	1,420.00
For surveys of drawings	1,296.00	1,187.04
	<u>\$15,388.05</u>	<u>\$18,719.70</u>

EXPENDITURE

For the year ending December 31st, 1912 in connection with the administration of the Steam Boilers Act.... \$25,820.57

The following is a complete list of manufacturers whose designs for boilers and boiler accessories have been submitted to and approved by the department.

MANUFACTURERS OF BOILERS.

Canada.

American-Abell Co., Toronto, Ont.
 Bell (Robert) Co., Seaforth, Ontario.
 Beatty (M.) & Sons, Welland, Ontario.
 Berg Manufacturing Co., Toronto, Ontario.
 Caledonian Ironworks, Montreal.
 Canada Iron Corporation, Ltd., Midland, Ontario.
 Doty Engine Works, Goderich, Ontario.
 Dominion Bridge Co., Montreal, P.Q.
 Fraser & Chalmers Co., Montreal, P.Q.
 Grand Trunk Pacific Railway Co., Winnipeg, Manitoba.
 Goldie & McCulloch, Ltd., Galt, Ontario.
 Inglis (John) Co., Ltd., Toronto, Ontario.
 Jenckes Machine Co., Ltd., St. Catherines, Ontario.
 Leonard (E.) & Sons, London, Ontario.
 Marsh & Henthorn, Ltd., Belleville, Ontario.
 Montreal Locomotive Works, Montreal.
 Matheson (I.) & Co., New Glasgow, N.S.
 Macdonald (The) Thresher Co., Stratford, Ontario.

Polson Iron Works, Toronto, Ont.
 Robb Engineering Co., Amherst, N.S.
 Sawyer-Massey Co., Ltd., Hamilton, Ontario.
 Waterous (The) Engine Co., Ltd., Brantford, Ontario.
 White (George) & Sons, Ltd., London, Ontario.

England.

Babcock & Wilcox, Ltd., London (Canadian Agency, Montreal).
 Fowler (John) & Co., Leeds, Yorkshire.
 Lubecker (The) Machine and Manufacturing Co., London, England.
 Robey & Co., Limited, Lincoln, Eng.
 Rushton Proctor Co., Lincoln, Eng.

United States.

American Hoist and Derrick Co., St. Paul, Minn.
 Aultman & Taylor Co., Mansfield, Ohio.
 Avery Co., Peoria, Ill.
 Broderick (The) Co., Muncie, Ind.
 Buffalo Steam Road Roller Co., Springfield, Ohio.
 Bucyrus Co., Ltd., Milwaukee, Wis.
 Bigelow Company, New Haven, Conn.
 Clyde Iron Works, Duluth, Minn.
 Case (J. I.) Threshing Co., Racine, Wis.
 Duluth Boiler Works, Duluth, Minn.
 Davenport Locomotive Works, Davenport, Iowa.
 Erie City Iron Works, Erie, Pa.
 Freeman (S.) & Sons, Racine, Wis.
 Farquahar (A. B.) Co., York, Pa.
 Frost Manufacturing Co., Galesburg, Ill.
 Garr, Scott Co., Richmond, Ind.
 International Boiler Works, East Stroudsburg, Pa.
 Johnson Bros., Ferrysburg, Mich.
 Kelly Springfield Road Roller Co., Springfield, Ohio.
 Leffel (J.) & Co., Springfield, Ohio.
 Marion Steam Shovel Co., Marion, Ohio (Canadian Agents, F. H. Hopkins & Co., Montreal).
 Muskegon Boiler Works, Muskegon.
 Mundy (J. F.) Hoisting Engine Works, Newark, N.J.
 Nichols & Shepard Co., Battle Creek, Mich.
 Oil Well Supply Co., Pittsburg, Pa.
 Orr and Sembower, Reading, Pa.
 Porter (H. K.) Co., Pittsburg, Pa.
 Reeves & Company, Columbus, Ind.
 Rumely Co., La Porte, Ind.
 Schwab-Lazotte Co., Milwaukee, Wis.
 Springfield Boiler and Manufacturing Co., Springfield, Ill.
 The Browning Engineering Co., Cleveland, Ohio.
 Union Iron Works, Erie, Pa.

MANUFACTURERS OF BOILER ACCESSORIES.

Canada.

Babcock & Wilcox, Ltd., Montreal, P.Q.
 Beatty (M.) & Sons, Ltd., Welland, Ont.
 Crane & Ordway Co., Ltd., Winnipeg, Man.
 Canadian Fairbanks Co., Montreal, P.Q.
 Engineering Specialties Co., Toronto, Ont.
 Goldie & McCulloch Co., Ltd., Galt, Ont.
 Jenkins Bros., Montreal, P.Q.
 Leonard, (E.) and Sons, Ltd., London, Ont.
 McAvity (T) and Sons, St. John, N.B.
 Morrison (Jas.) and Sons, Brass Mfg. Co., Toronto, Ont.

Penberthy Injector Co., Windsor, Ont.
 Peacock Bros., Montreal, P.Q.
 Robb Engineering Co., Amherst, N. S.

United States.

American Steam Gauge & Valve Co., Boston, Mass.
 Ashton Valve Co., Boston, Mass.
 Ashcroft Manufacturing Co., Chicago, Ill.
 Buckeye Iron & Brass Works, Dayton, Ohio.
 Bordo (L. J.) Co., Philadelphia, Pa.
 Crosby Steam Gauge & Valve Co., Boston, Mass.
 Crane Company, Chicago, Ill.
 Industrial Instrument Co., Foxboro, Mass.
 Huyette, (P.B.) Co., Philadelphia, Pa.
 (Submitted by H. L. Pelier & Co., Montreal, P.Q.)
 Kunkle (E.B.) & Co., Fort Wane, Ind.
 Lunkenheimer Co., Cincinnati, Ohio.
 Lonergan, (J. E.) & Co., Philadelphia, Pa.
 Marsh, (J. P.) & Co., Chicago, Ill.
 Nelson Valve Co., Philadelphia, Pa.
 Ohio Brass Works, Mansfield, Ohio.
 Powell (Wm.) & Co., Cincinnati, Ohio.
 Pittsburg Valve Foundry & Construction Co., Pittsburg, Pa.
 Roe Stephens Co., Detroit, Mich.
 United States Gauge Co., New York, N. Y.

EDMONTON, January 11th, 1913.

JOHN STOCKS, Esq.,

Deputy Minister of Public Works,

Edmonton, Alta.

SIR,—I have the honour to submit to you my annual report for the year ending December 31st, 1912, in accordance with section 8 of The Boilers Act.

Owing to the rapid increase in the business in this branch during the year I have been obliged, with your consent, to relinquish the charge of my district lying north of the Saskatchewan River to Inspector D. Fraser, in order to devote the whole of my time to the general administration of "The Boilers Act" and the regulations governing construction and inspection of boilers throughout the province.

It is regretted that I cannot compile correct data for your information, in time for publication, covering the number and variety of designs submitted for the approval of the department, also the correspondence received and sent out in connection with this service, further than to state that the revenue derived therefrom amounts to \$1,187.04.

The work of surveying designs is seriously delayed from time to time, due to frequent interruptions consequent upon having to interview representatives of the various manufacturers and others directly interested in the work of the branch generally, and these daily interruptions make it impossible for me to devote the time necessary to a proper supervision of matters outside the office relative to the Act and regulations which, if thoroughly understood by the steam users and their employees, would result in a uniform application of same throughout

the province, and would also eliminate to a large extent the possibility of any misunderstanding regarding the requirements necessary in the installation of new plants.

We have at the present time at least 150,000 boiler horsepower under our supervision, estimated as follows:

Southern Alberta District.

	Horsepower
Commercial	29,200
Agricultural	13,100
Total	42,300

Calgary District.

	Horsepower
Commercial	26,000
Agricultural	14,000
Total	40,000

Central Alberta.

	Horsepower
Commercial	6,500
Agricultural	8,800
Total	15,300

Northern Alberta.

	Horsepower
Commercial	19,000
Agricultural	6,000
Total	25,000

The foregoing represents a gross total of 122,600 horsepower inspected during the year, to which must be added some 28,000 (a conservative estimate) not inspected, and comprised mostly of agricultural power, making in all a figure exceeding 150,000 horsepower operated during the past year.

Forty-four per cent. of this power is being utilized for development and industrial purposes, 38 per cent. agricultural, and 18 per cent. coal mines.

The figures quoted above do not include boilers used solely for heating purposes, or other boilers exempted from inspection under Section 3 of the Act.

Notwithstanding the increased number of boiler plants in operation during the past year, we are pleased to say that we can again report no accidents have occurred to any boiler or other machinery under the Act causing loss of life or even serious injury to any person.

The operation of "The Boilers Act" enacted February 16, 1912, has been very satisfactory generally, both to the public and the boilers

branch, and if the three items therein are corrected as recommended to you last December, it will complete an Act that can be successfully applied for years to come.

I have to report 19 convictions obtained throughout the province during the year.

I am, Sir,

Your obedient servant,

F. W. HOBSON,

Chief Inspector of Boilers.

LETHBRIDGE, January 2nd, 1913.

JOHN STOCKS, ESQ.,

Deputy Minister of Public Works,

Edmonton, Alta.

SIR,—I have the honour to submit to you my annual report for the year ending December 31st, 1912, as required by section 8 of the Boilers Act.

The year's work opened in January with the usual annual conference of the district inspectors held in Edmonton for the purpose of discussing matters of importance connected with the branch generally in all parts of the province. I left Edmonton for Lethbridge on February 14th and devoted the balance of the month to inspection of boilers in the Crow's Nest Pass district, these not having been inspected during the year 1911.

In the month of March I held consecutive examinations for engineers at 14 different points in my district, ending on the 6th of April. In addition to these, there have been examinations held in the court house building at Lethbridge on the first Saturday of each month throughout the year, which have proved to be a great convenience to candidates, although the work takes up considerable time afterwards checking over and marking papers written at the examinations, applications for certificates during the year being very numerous.

Office work in general is still heavy and occupies much time, letters and personal enquiries are on the increase, while special inspection work performed at the request of various owners, has broken in on the daily routine of district work, firms being most anxious that everything in their plans should be first class and conform to the regulations.

The results of engineers' examinations are hereafter given in detail:

A total number of 366 candidates were examined, 38 of these failed to pass for the class in which they sat, but were granted certificates of a lower grade.

Issue of certificates recommended as follows:

Provisional	167
Final traction	98
Third class stationary	75
Second class stationary	21
First class stationary	5
Total	<u>366</u>

One hundred and one permits were issued under section 34 of The Boilers Act, to enable employers to keep their plants in operation until certified men could be obtained.

One engineer has had his certificate suspended for 12 months on account of gross carelessness in the discharge of duty.

There has been a large increase in the number of both stationary boilers and plowing outfits during the year, and it has been impossible with only one assistant inspector to cover the whole of this division, though we have one automobile which has been used for six months to the best advantage in the district where results would be most satisfactory. The work as a whole is not up to date, as there still remain many boilers which have not been inspected during the year just ended.

Summary of boilers inspected and certificates issued therefor by me.

Inspected and certificates issued	195
Inspected and no certificates issued	7
Total	<u>202</u>
Condition of boilers inspected, good	112
Condition of boilers inspected, fair	82
Condition of boilers inspected, moderate	4
Condition of boilers inspected and condemned	4
Total	<u>202</u>

Following is the number of different types of boilers inspected:

Horizontal Return Tubular	46
Locomotive	123
Water Tube	5
Robb Mumford	7
Robb Brady	4
Vertical Fire Tube	16
Marine	1
Total	<u>202</u>

I have to report four boiler accidents as follows:

(1) The firebox crown sheet of a locomotive type of boiler collapsed, caused by shortness of water.

While this was a very serious accident, I am pleased to say that no one was injured.

(2) Three horizontal return tubular boilers had bottoms bulged seriously, due to formation of scale in each case. Two of these boilers were in the same plant in Crow's Nest Pass district, while the third was in Medicine Hat.

Notification of these accidents only reached this office on December 30th, and the boilers were inspected on the day following. Investigation into the cause is now being made.

Your obedient servant,

NAT MARSHALL,

Inspector of Boilers.

LETHBRIDGE, January 2nd, 1913.

JOHN STOCKS, ESQ.,

Deputy Minister of Public Works,

Edmonton, Alta.

SIR,—I have the honour to submit to you my annual report for the year ending December 31st, 1912, in accordance with the requirements of section 8 of The Boilers Act.

Travelling throughout the district during the first five months of the year was done by team and rail. From the end of May until the beginning of November all travelling was done by automobile, while from November to the close of the year a great many of the journeys had to be made by team and rail, due to the bad state of the roads.

On the 31st of December I accompanied Inspector Marshall to the Crow's Nest Pass district, also to Medicine Hat to inspect three boilers which had been damaged by over-heating of plates. Though the damage to the boilers was serious, I am pleased to say no one was injured.

During the year just ended I inspected a total of 339 boilers, summarised as follows:

Boilers inspected and certificates issued	319
Boilers inspected and no certificates issued	20
Total	339

Conditions of boilers inspected: Good, 270; moderate, 11; fair, 54; bad, 3; condemned, 1. Total, 339.

Different types of boilers inspected:

Locomotive	221
Horizontal Tubular	56
Robb Mumford	13
Water Tube	19
Vertical Dry Top	20
Vertical Submerged Top	1
Vertical Flue	1
Horizontal Return Flue	8
Total	339

I have examined 24 candidates for provisional certificates during the year, to whom same were granted.

Twenty-three permits have been issued under section 34 of The Boilers Act, in order to enable employers to keep their plants going.

Your obedient servant,

WM. GRAY,

Assistant Inspector of Boilers.

CALGARY, January 14th, 1913.

JOHN STOCKS, ESQ.,

Deputy Minister of Public Works,

Edmonton, Alta.

SIR,—I have the honour to submit my annual report for the year 1912, as inspector of boilers for District No. 2, in accordance with section 8 of The Boilers Act.

At the beginning of the year I attended the annual conference of the district inspectors, held in Edmonton, for the purpose of discussing important matters affecting the operations of the branch generally throughout the whole of the province, returning to Calgary for district work on February 14th.

Commencing on February 27th began to hold a series of 15 advertised examinations of candidates for engineer's certificates in different parts of the district, and in addition to these, have held examinations in the public works office at Calgary on the first Saturday in each month throughout the year, with the exception of the February examination, which was held during the time I was absent from Calgary attending conference referred to above, Assistant Inspector Hodges taking charge during my absence.

Following is a summary showing the total number of applicants examined for engineer's certificates:

First class	1
Second class	7
Third class	150
Provisional	225
Renewals of provisional certificates	30
Failed to qualify for certificates	68
Total	481

Seventy-six permits were issued to owners during the year under section 34 of The Boilers Act.

During the year I visited 157 boilers and issued inspection certificates for 135, the remainder being out of commission, changing owners, etc.

Condition of boilers inspected and for which certificates were issued:
Good, 62; very fair, 58; fair, 15.

Various types of boilers inspected:

Horizontal Tubular	25
Water Tube	12
H. F.	5
Loco Firebox	31
Vertical	58
Return Tubular	3
Lancashire	1
Total	135

Three H. F. boilers were discarded upon the expiration of inspection certificate owing to age and condition, 13 more were undergoing repairs and 6 were condemned.

The office work generally has been very heavy during the year—interviewing applicants, answering correspondence, and attending to the immediate requirements of a large number of contractors has kept me busy a great deal of the time; in fact, this work is steadily increasing and demands almost the whole of my time, consequently, with but a few exceptions, I have been unable to visit work lying outside the city.

My assistant, by means of the automobile supplied us last spring, has been able to cover a large portion of this district, though there still remain parts not visited, and taking into consideration the large increase in the number of stationary plants installed, others under course of erection, together with a very considerable number of new steam outfits shipped in by farmers and contracting firms during the year, more assistance will be necessary in order to satisfactorily cover the whole district. Neither my assistant or myself have taken any holidays owing to pressure of work.

Two accidents were reported to me during the year, one on a steam header, the other a fly-wheel rupture. Investigations into the cause of these revealed no evidence of negligence on the part of the parties concerned.

One conviction was secured for illegal operation, information laid and prosecution made under sub-clause 2 of section 18, The Boilers Act.

No fatalities or personal injuries of a serious or minor nature to report.

I have the honour to be, Sir,

Your obedient servant,

JOS. BUXTON,

Inspector of Steam Boilers.

CALGARY, January 14th, 1913.

JOHN STOCKS, ESQ.,

Deputy Minister of Public Works,

Edmonton, Alta.

SIR,—I have the honour to submit my report as assistant inspector No. 2 district, Calgary, for the year ending December 31st, 1912, as required by section 8 of The Boilers Act.

I have inspected 336 boilers and issued certificates for 327, the balance of 9 boilers being out of service for the present season. Three were condemned owing to condition of construction and age, one having to go out of service at the time of inspection, the other two being permitted to operate at reduced pressure until the expiration of certificates in order to enable the owners to continue operating while preparing for new installation. In addition to the above, three boilers were ordered to be shipped out of the province on account of their not complying with the regulations.

The following shows the types of boilers examined and condition of same:

52 Horizontal Tubular.
9 Return Tubular.
220 Locomotive Firebox.
54 Vertical.
1 Water Tube.

Condition: Good, 118; very fair, 179; fair, 37; condemned 3; to be shipped out, 2.

Three special inspection trips were made at the request of owners, expenses, etc., being collected for same.

In February, during the time Mr. Buxton was attending the annual conference of the inspectors at Edmonton, I held the regular monthly examination of candidates in Calgary and recommended the issue of 1 heating, 8 provisional and 10 third class certificates. One candidate failed to pass.

During the year I also recommended the issuing of two renewals of provisional certificates, one provisional certificate and two heating certificates.

The automobile provided for this department has been of great service, enabling some of the scattered outfits to be visited for the first time in three years. A larger portion of the district has been visited than would have been possible by the use of steam. From the latter part of May to the end of the year auto mileage aggregates 4,895 miles.

Public opinion in connection with the visit of the boiler inspector has, in my experience, undergone a change, such visit being now generally appreciated, which indicates that the supervision of boilers and advice given to steam users is having a good effect, more especially so in the case of owners having long experience in the operation of boilers.

Two convictions were secured for illegal operation during the year.

I have the honour to be,

Your obedient servant,

E. S. HODGES,

Assistant Inspector of Boilers.

RED DEER, January 4th, 1913.

JOHN STOCKS, ESQ.,

Deputy Minister of Public Works,

Edmonton, Alta.

SIR,—I have the honour to submit to you the following report of the work done in this district under The Boilers Act for the year 1912, in compliance with section 8 of the Act.

On returning from my vacation I reported at Edmonton for instructions, after which I left for Red Deer and started out immediately to preside at the engineer's examinations which had been previously advertised for this district; these completed, I continued the work of inspection, returning to headquarters on the first Saturday of each month for the purpose of conducting the regular monthly examinations of candidates for engineer's certificates.

During the year I inspected most of the boilers in the western, northern and eastern parts of my district, but was not able to visit all the boilers in these parts, owing to the very great increase in the number shipped in during the year.

Continued satisfaction with the new boilers built to Alberta regulations and equipped with approved fittings is found amongst the owners and users.

The following tables give the number and condition of boilers inspected by me:

Boilers inspected and certificate issued	240
Boilers inspected and certificate issued, sec. 5, sub-sec. 3	1
Boilers inspected, shut down for repairs, certificate issued.....	6
Boilers inspected, shut down for repairs	5
Boilers inspected, no certificate issued, boiler not been used....	1
Boilers inspected, condemned	5
Total number of boilers inspected	258

The boilers for which certificates of inspection were issued are rated as follows: Good, 189; very fair, 46; fair, 12. Total, 247.

The several types of boilers inspected are enumerated as follows:

Locomotive Firebox	181
Horizontal Tubular	40
Vertical Tubular	17
Return Tubular	13
Internal Furnace Tubular	6
Water Tube	1
Total	258

Sixteen advertised examinations for engineers were held in this district during the year, together with the regular monthly examinations at headquarters, excepting the months of January, February and March.

The following is a summary of the candidates examined for final certificates and the results:

GRADE	Passed	Failed and given second Prov.	Failed and given Prov.	Failed
Traction and Portable	47	34	0	0
Creamery	5	0	1	0
Third Class	6	0	1	2
Second Class	2	0	0	2

Total Candidates examined, 100.

The following is a list of the applicants for provisional certificates:

Examined and granted provisional certificate, good	21
Examined and granted provisional certificate, very fair.....	51
Examined and granted provisional certificate, fair	40
Examined and granted provisional certificate, poor	7
Not examined, granted under section 45	4
Total provisional certificates issued	123
Examined for provisional and failed	15
Turned down for lack of experience	36
Total applicants	174

I have recommended the renewal of the following provisional certificates:

Traction and Portable	30
Stationary	1

Twenty-six permits have been issued under section 34, a larger number than in any previous year for this district, there being more demand than ever for engineers during the threshing season, and I was compelled to issue these permits in order to prevent the work being retarded.

During the year I recommended the suspension of one final certificate for a period of six months, the holder thereof having, in my opinion, caused damage to a steam plant by his careless operation. I also refused to recommend renewal of certificates for the holders of nine expired provisional certificates, or allow them to sit for a higher certificate, this for careless operation, incompetency and insobriety which had been reported to me by the owners of the damaged boilers.

Considerable illegal operation of boilers has been carried on this year by men of the transient class who were employed in some instances by owners who neglected to ask these men to produce their engineer's certificate, and as a consequence of this, damage to plants has been the result. Several boilers have also been damaged through careless operation by men holding provisional certificates. Nine of these men have been prevented from further operation, as mentioned above. In matters of this kind it is almost impossible to get the owners to lay information according to section 50. They simply discharge the man from their employ and make no report either to the inspector or the department.

One person was prosecuted during the year for infringement of sub-section 3, section 32, of The Boilers Act.

No accidents of a serious nature have been reported to me as the result of defective boilers or the connections thereto in this district.

I have the honour to be, Sir,

Your obedient servant,

W. D. WATSON,

Boiler Inspector.

EDMONTON, January 1st, 1913.

JOHN STOCKS, ESQ.,

Deputy Minister of Public Works,

Edmonton, Alta.

SIR,—I have the honour to submit the following report in connection with inspection of boilers in district No. 4 for the year 1912, in accordance with section 8 of The Boilers Act.

The inspectors' annual meeting convened in January and continued in session until February 14th, for the purposes of transacting the usual business for which this meeting is called.

On March 2nd I commenced to hold the series of advertised spring examinations, beginning at Strathcona and continuing at 17 other points in the district, finishing the last of these in Hourston's Hall at Edmonton on April 1st. At these examinations, together with those held in the Orange Hall, Strathcona, on the first Saturday of each month during the year, 363 candidates were examined for final and provisional certificates, divided as follows:

For first class engineer's certificate	4
For second class engineer's certificate	23
For third class engineer's certificate	108
For traction final engineer's certificate	51
For provisional engineer's certificate	169
For renewal of provisional certificate	8
Total	363

Forty-four permits were also issued for the operation of plants where it was impossible at the time to secure the services of a duly qualified engineer. These permits were issued under the provision of section 34 of The Boilers Act.

The demand for engineers holding second-class certificates still continues to be greater than the supply, a condition of things hard to meet unless those who are at present holding "thirds" show more desire to better their positions in the future than they have done in the past.

The threshing season revealed the fact that in some parts of the district there was a scarcity of traction engineers, consequent upon the large increase in the areas of farm lands brought under cultivation necessitating an increase in the number of threshing outfits, and notwithstanding the fact that many gasoline tractors have been shipped into

the district, meeting with more success than heretofore, both as plowing and threshing engines, the steam tractor still continues to be the more popular factor for such purposes, especially where fuel and water are reasonably available.

An ever increasing number of personal inquiries from newcomers to the province, together with answering letters and attending to "trouble calls" received from firms in town requiring immediate service, demand a very large portion of time which otherwise could be devoted to inspections.

Since completing the spring examinations in April, my work has been principally confined to the city or its immediate vicinity, Assistant Inspector Poole taking the outlying districts north and east, going as far north as Athabasca Landing, and east to the boundary of the province.

Following is a list of the different types of boilers inspected by me:

Locomotive type	47
Horizontal Tubular	34
Return Tubular	3
Vertical	44
Internal Furnace	6
Water Tube	12
Total	146

Condition of above: Good, 102; fair, 42; poor, 2.

I have no accidents of a serious or minor nature to report in connection with the operation of steam boilers and engines.

One provisional certificate was cancelled for incompetency on the part of the holder.

There were four prosecutions in the district for illegal operation, the minimum penalty being imposed in each case.

I am, Sir,

Your obedient servant,

DAVID FRASER,

Inspector of Boilers.

EDMONTON, January 14th, 1913.

JOHN STOCKS, ESQ.,

Deputy Minister of Public Works,

Edmonton, Alta.

SIR,—I have the honour to submit to you the following report for the year ending December 31st, 1912, in accordance with section 8 of The Boilers Act.

At the commencement of the year I started out from Edmonton and inspected all the boilers along the route of the Grand Trunk Pacific Railway, west as far as mileage 92. These completed, I went north to

Athabasca Landing, working forty miles west, then followed the trail east and north to Lac la Biche, inspecting all the boilers which could be found in this section of the province. From Lac la Biche to Boyne and Saddle Lake, thence to St. Paul de Metis, and from there to Frog Lake.

I found a very large number of boilers scattered through this part of the country, mostly new ones built to approved designs from Alberta regulations.

Continuing south I crossed the river, travelling as far as Chauvin on the Grand Trunk Pacific, taking in a strip of country 15 miles wide with the object of inspecting every boiler known to be operating in this part of the district, finishing the year's work at Holden during the latter part of December.

Engineers were found to be very scarce in many parts of the district visited. This will account for my having to issue 27 permits under section 34 of The Boilers Act.

Total number of boilers inspected and certificates issued therefor, 221.

Following is a list of the different types of boilers inspected:

Horizontal Tubular	39
Locomotive	118
Robb Mumford	4
Vertical	46
Water Tube	4
Robb Brady	1
Return Flue	9
Total	221

I have no accidents of a serious or minor nature to report.

Your obedient servant,

F. P. POOLE,

Assistant Inspector of Boilers.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
First Class			
Archibald, Harry P.	Lethbridge	*24	Aug. 15, 1900
Altham, Geo. H.	Lethbridge	23	Apr. 8, 1908
Aitken, Robert C.	Edmonton	15	June 29, 1907
Alexander, Harry G.	Edmonton	43	Apr. 13, 1907
Brisette, Narcisse	Morinville	*15	Mar. 28, 1889
Buxton, Jos.	Calgary	*35	Aug. 29, 1901
Birkett, Holland G.	Cardston	9	Sept. 5, 1906
Briggs, Thos. L.	Calgary	10	Sept. 27, 1906
Birrell, Andrew D.	Nanton	26	Aug. 28, 1908
Banks, Henry H.	Macleod	31	Dec. 14, 1908
Broughton, John Wm.	Red Deer	34	Mar. 17, 1909
Bailey, Hy. Chas.	Edmonton	50	Feb. 11, 1911
Blackburn, Robt. Neale	Edmonton	57	Feb. 10, 1912
Cross, Wm.	Calgary	*2	Mar. 28, 1899
Cooper, Watt	Canmore	6	Aug. 11, 1906
Caldwell, Robt.	Edmonton	*41	Oct. 16, 1903
Cross, Isaac E.	Ponoka	*47	Oct. 15, 1904
Cope, Cuthbert E.	Edmonton	24	Apr. 22, 1908
Christie, Alex'r G.	Exshaw	19	Jan. 20, 1908
Collard, Albert N.	Moose Jaw	21	Mar. 26, 1908
Carruthers, J. A.	Calgary	51	May 26, 1911
Cunningham, Wm. J.	Calgary	62	Apr. 26, 1912
Cooke, Robt. Pears	Edmonton	66	June 21, 1912
Davidson, James	Edmonton	38	Sept. 13, 1909
Davey, Edward	Medicine Hat	44	Apr. 25, 1910
Defleux, Chas. Albert	Edmonton	65	June 17, 1912
Dick, Archibald	Lethbridge	64	May 18, 1912
Evans, Dan	Edmonton	*12	Mar. 28, 1899
Ewing, David	Strathcona	36	May 3, 1909
Edwards, Wm.	Lethbridge	48	Nov. 7, 1910
Fraser, David	Strathcona	*20	Oct. 9, 1899
Finch, Theo. S.	Raymond	5	Aug. 10, 1906
Gale, Ernest A.	Calgary (dup.)	29	Dec. 11, 1908
Goellnight, Leonard E.	Hillcrest	40	Mar. 30, 1910
Gray, Adam S.	Calgary	45	Apr. 29, 1910
Gray, Wm. G.	Lethbridge	60	Mar. 14, 1912
Griffiths, Alf. J.	Macleod	68	Dec. 17, 1912
Hindsmarsh, Wm.	Calgary	41	Apr. 11, 1910
Hubbard, Sydney T.	Edmonton	*46	Apr. 18, 1904
Heist, Wm. E.	Edmonton	*36	Dec. 18, 1901
Hobson, Francis W.	Strathcona	*50	Apr. 1, 1905
Hill, John	Edmonton	25	June 25, 1908
Hargreaves, Thos. J.	Hillcrest	55	Sept. 9, 1911
Higgins, Alex.	Lethbridge	59	Mar. 14, 1912
Isaac, Wm.	Calgary	14	June 20, 1907
Jackson, John A.	Strathcona	*25	Oct. 23, 1900
Jones, Herbert W.	Bellevue	30	Dec. 11, 1908
Kelly, John	Edmonton (no record)..		Dec. 3, 1905
Kearsley, Geo.	Edmonton	8	Sept. 5, 1906
Lunn, John T.	Edmonton	*53	May 26, 1905
Moore, Geo.	Frank	*55	July 21, 1905
Marshall, Jas. Wm.	Calgary	20	Jan. 20, 1908

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
First Class—Continued			
Marshall, Nathaniel	Edmonton	32	Feb. 7, 1908
McCall, Jas. F.	Calgary	7	Aug. 11, 1906
McFee, Norman	Red Willow	*48	Nov. 22, 1904
McClymont, Jas. D.	Edmonton	27	Sept. 18, 1908
McNaughton, Peter	Edmonton	*21	Oct. 9, 1899
McMillan, Hugh A.	Edmonton	47	Oct. 22, 1910
Mudie, Alf. H.	Diamond City	54	Aug. 24, 1911
Mainwaring, John H.	Edmonton	58	Feb. 23, 1912
McMahon, William	Taber	67	Dec. 17, 1912
Niven, Robt.	Lethbridge	*23	July 28, 1900
O'Donnell, John E.	Edmonton	37	July 5, 1909
Oliver, Ernest H.	Calgary	2	Apr. 30, 1906
Ritchie, Wm. Jas.	Canmore	4	May 15, 1906
Rice, John H.	Calgary	1	Apr. 30, 1906
Reid, Arthur	Lethbridge (dup.)	39	Jan. 22, 1910
Richardson, Matthew C.	Kipp	56	Nov. 17, 1911
Scott, John	Lethbridge	*14	Mar. 28, 1899
Stapely, Tobias B.	Edmonton	*45	Apr. 18, 1904
Stafford, David G.	Coleman	35	Mar. 30, 1909
Scott, James	Lille	22	Apr. 7, 1908
Scott, Robert	Calgary	42	Apr. 11, 1910
Simpson, William	Coleman	52	June 20, 1911
Searle, William	Coal City	53	July 13, 1911
Strom, Theodore	Calgary	63	Apr. 30, 1912
Turgeon, Cleophas.	Edmonton	*5	Mar. 28, 1899
Taylor, Geo. R.	Strathcona	*11	Mar. 28, 1899
Turner, Ornelo H.	Calgary	*34	July, 1901
Tanner, Harry P.	Taber	18	Dec. 26, 1907
Todd, Wm.	Edmonton	33	Mar. 4, 1909
Tames, Edward	Edmonton	61	Apr. 25, 1912
Verdon, Jos. B.	Calgary	49	Nov. 13, 1910
Watson, Wm. D.	Bankhead	3	May, 15, 1906
Watson, John T.	Calgary	13	June 7, 1907
White, E. Lionel	Calgary	12	Apr. 6, 1907
Watson, Jas. S.	Bankhead	46	Sept. 23, 1910
Second Class			
Anderson, C. J. B.	Calgary	*109	Feb. 7, 1901
Angus, Robert	Angus Ridge	*160	Oct. 2, 1901
Alderson, Robt.	Coleman	126	Apr. 22, 1908
Adair, Fred D.	Edmonton	30	May 10, 1906
Allworth E. Mortimer	Okotoks	81	June 19, 1907
Anderson, Andrew	Calgary	208	Aug. 15, 1910
Aitken, David	Lethbridge	212	Sept. 12, 1910
Antrobus, Wm.	Edmonton	260	Nov. 17, 1911
Brisette, Louis	Morinville	193	Apr. 13, 1910
Bradden, Wm. T.	Strathcona	194	Apr. 13, 1910
Biamont, Antonio	Edmonton	329	Nov. 23, 1912
Brice, Henry B.	Calgary	207	Aug. 8, 1910
Bawtinheimer, Geo. H.	Red Deer	*7	Sept. 4, 1899
Biery, Chas.	Strathcona	*32	Mar. 9, 1900
Blatchford, K. A.	Edmonton	*88	Oct. 23, 1900
Blain, J. W.	Strathcona	*106	Dec. 31, 1900
Bannerman, Jas. A.	Red Deer	*162	Dec. 18, 1901

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Second Class—Continued			
Brownlow, Hy. A.	Lacombe	*163	Dec. 23, 1903
Brewster, W. A.	Edmonton	*195	May 13, 1903
Bowden, H. S.	Strathcona	*198	May 13, 1903
Ballantyne, Robt.	Calgary	*229	Mar. 14, 1904
Barnhouse, Wm.	Edmonton	*244	May 26, 1904
Burkholder, Hy. J.	Strathcona	*267	Oct. 15, 1904
Beamish, Crandell	Didsbury	118	Apr. 22, 1908
Bentley, Emerson D.	Medicine Hat	17	Apr. 11, 1906
Burger, M. E.	Strathcona	2	Sept. 18, 1905
Baird, Jas. B.	Red Deer	116	Apr. 14, 1908
Bryson, Wm. J.	Medicine Hat	178	Dec. 4, 1909
Blair, Wm.	Lille	25	Apr. 30, 1906
Berry, Stephen	Taber	127	Apr. 22, 1908
Brill, Geo.	Red Deer	161	Aug. 24, 1909
Brown, David	Calgary	75	May 4, 1907
Bruce, Geo.	Lethbridge	114	Apr. 8, 1908
Bagley, Wm. S.	Edmonton	156	June 18, 1909
Broadwell, Amos	Pincher Creek	170	Sept. 24, 1909
Bailey, Douglas A.	Calgary	173	Oct. 22, 1909
Brenton, Chas. J.	Edmonton	234	Apr. 1, 1911
Bratz, Emil	Pincher Creek	272	Dec. 19, 1911
Brown, Robt.	Lundbreck	261	Nov. 17, 1911
Brooks, Fred	Edmonton	259	Nov. 10, 1911
Bailey, W. Edgar	Lethbridge	273	Dec. 19, 1911
Baron, Harry	Diamond City	283	Feb. 26, 1912
Bodard, Alcide	Edmonton	312	Aug. 12, 1912
Beyer, Otto R.	Diamond City	296	May 18, 1912
Benson, Frank H.	Edmonton	315	Aug. 22, 1912
Beadle, Elkanah Wm.	Edmonton	320	Sept. 25, 1912
Cope, Edmund, G. M.	Lethbridge	*1	June 30, 1899
Clark, W. Harold	Edmonton	*15	Oct. 9, 1899
Conn, David	Lethbridge (dup.)	181	Jan. 19, 1910
Chalmers, Walter N.	Edmonton	*51	May 28, 1900
Cullen, Jas. E.	Calgary	*115	Feb. 20, 1901
Converse, Stephen J.	Ponoka	*192	Mar. 6, 1903
Clifford, Robt. A.	Strathcona	*197	May 13, 1903
Chapman, A. B.	Red Deer	*239	Apr. 18, 1904
Callery, Fredk.	Calgary (dup.)	150	Nov. 10, 1908
Coggan, Frank D.	Calgary	72	June 3, 1907
Cousins, Arthur	Calgary	24	Apr. 30, 1906
Crawford, Samuel L.	Strathcona	52	Oct. 25, 1906
Card, Caleb A.	Red Deer	53	Nov. 2, 1906
Currie, Jas. J.	Calgary	110	Mar. 23, 1908
Caldwell, Theophilus	Calgary	105	Jan. 20, 1908
Cranston, Adam	Calgary	55	Jan. 22, 1907
Clinton, Otto M.	Edmonton	79	June 14, 1907
Collins, Fred M.	Frank	88	July 16, 1907
Campbell, Mal. L.	Earlsville	96	Oct. 28, 1907
Cowall, Cederic A.	Red Deer	100	Dec. 5, 1907
Calder, Hector J.	Calgary	112	Mar. 23, 1908
Carr, Alve B.	Edmonton (dup.)	203	June 2, 1910
Cutting, Chas.	Vermilion	130	May 7, 1908
Collard, Geo. Lewis	Medicine Hat	152	Jan. 18, 1909
Croft, Wm.	Strathcona	174	Oct. 27, 1909
Carpenter, Wilfred	Frank	188	Mar. 25, 1910
Cruikshanks, Geo.	Lethbridge	185	Mar. 15, 1910
Commeyne, Florent	Edmonton	300	May 29, 1912
Candlish, William	N. Edmonton	281	Feb. 23, 1912
Craig, Hugh S.	Calgary	321	Sept. 28, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Second Class—Continued			
Dozey, Chas.	Frank	218	Sept. 16, 1910
Duncombe, Walter	Taber	217	Sept. 16, 1910
Donaldson, Maxwell	Lethbridge (dup.)	182	Jan. 19, 1910
Doughty, Jas.	Calgary	*143	July 25, 1901
Dresser, Bertram W.	Wetaskiwin	*261	Oct. 15, 1904
Drader, John A.	Pincher Creek	*290	Dec. 30, 1904
Dean, David	Calgary	*298	Mar. 16, 1905
Drees, Max L.	Edmonton (dup.)	*269	Nov. 30, 1905
Danner, Clifford	Lacombe	22	Apr. 25, 1906
Duncan, Andrew, sr.	Edmonton	129	May 7, 1908
Dick, Wm.	High River	57	Jan. 14, 1907
Duncan, Andrew, jr.	Edmonton	139	Sept. 18, 1908
Dunbar, Hy. C.	Edmonton	123	Apr. 22, 1908
Donaldson, Samuel	Lethbridge	164	Sept. 15, 1909
Dodd, Jas.	Edmonton	157	July 5, 1909
Daley, Wm.	Strathcona	163	Aug. 27, 1909
Dowsett, Nathaniel	Frank	228	Mar. 7, 1911
Davies, Samuel	Elcan	274	Dec. 19, 1911
Donnelly, Jas.	Bellevue	278	Jan. 16, 1912
Davidson, Eric	Calgary	298	May 22, 1912
Downing, Augustus	Calgary	292	Apr. 26, 1912
Douglas, John H. W.	Red Deer	331	Dec. 17, 1912
Evans, Hy. W.	Anthracite	*28	Feb. 13, 1900
Emery, Ray C.	Strathcona	*264	Oct. 15, 1904
Evans, Wm.	Frank	7	Sept. 13, 1905
Eby, Josiah S.	Didsbury	95	Oct. 24, 1907
Evans, Geo. A.	Raymond	209	Aug. 30, 1910
Edmonds, Thos. J.	Edmonton	231	Mar. 20, 1911
Elderkin, Wm. J.	Calgary	248	Aug. 22, 1911
Eldridge, Jas. Thomas	Passburg	285	Mar. 19, 1912
Frieman, Manfred	Lethbridge	234	Nov. 4, 1912
Finch, Robt. H.	Calgary	*184	Oct. 10, 1902
Fraser, Wm.	Strathcona	*265	Oct. 18, 1904
Frame, Jas. F.	Lethbridge	*219	Oct. 6, 1903
Fraser, Chas.	Okotoks	*300	Mar. 16, 1905
Fidler, J. J.	Calgary (dup.)	135	Aug. 6, 1908
Fleetwood, Howard A.	Edmonton	*262	Oct. 15, 1904
Fisk, James Geo.	Fort Saskatchewan	*307	Apr. 14, 1905
Faulkner, Jos. W.	Lundbreck	42	Aug. 11, 1906
Flan, Jas. Robt.	Calgary	85	July 16, 1907
Foote, Wm.	Pincher Creek	87	July 16, 1907
Foster, John Thos.	Calgary	97	Nov. 14, 1907
Foster, Riley	Magrath	297	May 13, 1912
Ferguson, Llwellyn, W.	Strathcona	301	June 28, 1912
Fabian, Henry B.	Tofield	311	July 23, 1912
Grieve, David	Calgary	*111	Feb. 7, 1901
Griffiths, W. H.	Anthracite	31	May 14, 1906
Garneau, Alexr.	Strathcona	*266	Oct. 15, 1904
Grieve, Wm.	Calgary	*276	Oct. 23, 1904
Gibbs, Morley C.	Calgary	297	Mar. 16, 1905
Ginter, Wm. C.	Edmonton	18	Apr. 11, 1906
Garner, Anthony	Bankhead	33	May 14, 1906
Godson, Wm.	Bankhead	83	June 26, 1907
Good, Wm.	Calgary	134	Aug. 6, 1908
Going, Phillip S.	Mountain View	238	April 24, 1911
Graves, Jas. H.	Calgary	229	Mar. 7, 1911
Grant, Alex.	Calgary	250	Sept. 8, 1911
Galloway, Alex.	Medicine Hat	323	Oct. 17, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Second Class—Continued			
Going, Ernest M.	Mountain View	290	Apr. 16, 1912
Gleaves, Geo. N.	Medicine Hat	314	Aug. 14, 1912
Gourley, Fred R.	Strathcona	316	Aug. 26, 1912
Hennegar, Ed. J.	Edmonton	*19	Oct. 2, 1899
Haines, Alfred H.	Edmonton	*33	May 7, 1900
Hillis, Hy.	Medicine Hat	*42	May 23, 1900
Hicklik, John W.	Calgary	*79	Sept. 29, 1900
Hisco, Thos. S.	Lethbridge	*85	Sept. 29, 1900
Howell, Edward	Battleford	*137	May 30, 1901
Hillis, Thos.	Lethbridge	*172	Aug. 18, 1902
Henneg, Michael	Calgary	*183	Oct. 10, 1902
Heatley, Wm.	Beaumont	*274	Oct. 4, 1904
Henry, Chas.	Strathcona	*234	Apr. 18, 1904
Hutchings, H. E.	Edmonton	*306	Mar. 31, 1905
Hackey, Thos. H.	Evarts	117	Apr. 14, 1908
Harper, Wm. H.	Lloydminster	10	Nov. 16, 1905
Heacock, Jas. H.	Calgary	71	June 3, 1907
Hay, Geo. Porter	Pincher Creek	44	Aug. 11, 1906
Howe, Wm. Ed.	Sunny Slope	49	Sept. 8, 1906
Hendry, Wm. A.	Edmonton	64	May 15, 1906
Harris, Samuel D.	Red Deer	62	May 7, 1907
Harris, V. H.	Red Deer	63	May 7, 1907
Hockin, John	Edmonton	91	Oct. 15, 1907
Hill, John	Strathcona	131	May 18, 1908
Hill, Marshall	Macleod	189	Mar. 21, 1910
Henry, Walter F.	Ponoka	224	Nov. 15, 1910
Hilton, Wm. H.	Taber	213	Sept. 12, 1910
Howard, Ernest E.	Conjuring Creek	201	June 1, 1910
Horn, James	Lethbridge	187	Mar. 15, 1910
Hodges, Elmer S.	Medicine Hat	198	Apr. 25, 1910
Holford, Jos. C.	Lac Ste. Anne	206	July 29, 1910
Henderson, Norman	Bellevue	230	Mar. 11, 1911
Hope, George	Royal View	286	Mar. 18, 1912
Holmes, Walter, C.	Calgary	282	Feb. 26, 1912
Irwin, Lester J.	Strathcona	*270	Oct. 15, 1904
Irving, Albert E.	Calgary	56	Jan. 22, 1907
Irvine, Alexr.	Calgary	165	Sept. 15, 1909
Inglis, George	Edmonton	266	Dec. 12, 1911
Judd, David H.	Calgary	*161	Oct. 5, 1901
Jarratt, Edward	Strathcona	*263	Oct. 15, 1903
Jackson, James O.	Inga	60	Apr. 8, 1907
Johnson, Pontus	Lewisville	235	Apr. 5, 1911
Jack, William	Bassano	246	June 30, 1911
Jacob, Arthur	Royal View	303	June 28, 1912
Kerr, Wm.	Lethbridge (dup.)	183	Jan. 19, 1910
Kidd, Fredk.	Calgary	*62	June 14, 1900
Kowalczyck, Antoine	St. Paul de Metis	*144	Feb. 16, 1900
Kadlec, J. J.	Wetaskiwin	*236	Apr. 18, 1904
Killam, Robt. C.	Red Deer	65	May 20, 1907
Keith, Edward C.	Lille	226	Dec. 8, 1910
Krammer, Frank	Calgary	293	May 1, 1912
Livingstone, Jas. C.	Lethbridge	214	Sept. 12, 1910
Lang, Jas.	Okotoks	*301	Mar. 17, 1905
Lacey, Wm. R.	Calgary	*182	Oct. 10, 1902
Lamb, Herb. David	Frank	41	Aug. 11, 1906
LeBreton, Gustav A.	Edmonton	*308	Apr. 14, 1905
Long, John	Okotoks	45	Oct. 11, 1906

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Second Class—Continued			
Laut, John R.	Crossfield	153	Apr. 6, 1909
LaVoi, Frank P.	Calgary	111	Mar. 23, 1908
Lavelle, Patrick	Exshaw	149	Oct. 30, 1908
Lewis, John H.	Lethbridge	166	Sept. 15, 1909
Langstroth, Alf.	Calgary	240	May 5, 1911
Lord, Victor H.	Diamond City	244	May 26, 1911
Letcher, Richard	Hillcrest	255	Oct. 24, 1911
Libby, Malcolm M.	Edmonton	271	Dec. 15, 1911
Laundy, Harry	Edmonton	325	Nov. 6, 1912
Moran, Austin	Lethbridge	*36	Mar. 23, 1900
Marshall, Fred, Jos.	Kamloops, B. C.	*203	Aug. 14, 1902
Morrison, John C.	Gleichen	*214	Sept. 24, 1903
Mortimer, Samuel M.	Strathcona	*241	May 26, 1904
Murray, Robinson	Calgary	104	Jan. 20, 1908
Merres, Horace	Red Deer	93	Oct. 22, 1907
Mjolness, John A.	Medicine Hat	16	Apr. 11, 1906
Mauland, Jack	Bankhead	99	Dec. 5, 1907
Morrison, Kenneth	Coleman	20	Apr. 19, 1906
Mair, Robt. B.	Strathcona	37	Aug. 8, 1906
Morgan, Thos. M.	High River	38	Aug. 7, 1906
Moore, Wm. A.	Red Deer	137	Aug. 13, 1908
Mueller, Karl F.	Lethbridge	147	Oct. 6, 1908
McKay, Daniel	Lethbridge	*4	June 30, 1899
McGee, Thos.	White Fish Lake (dup.)	113	Mar. 28, 1908
McConnell, Wm. J.	Lethbridge	*	Oct. 8, 1903
McIntyre, John	Calgary (dup.)	48	Aug. 16, 1906
McKim, Nelson	Edmonton	14	Mar. 26, 1906
McClafin, W. G.	Ponoka	*237	Apr. 18, 1904
McCardia, Samuel	Edmonton	78	June 14, 1907
McLean, Fredk. A.	Edmonton	*305	Mar. 31, 1905
McNelly, S.	Okotoks	107	Mar. 23, 1908
McDonald, Simon	Frank	15	Mar. 28, 1906
McDonald, E. R.	Edmonton	120	Apr. 22, 1908
MacDonald, Alex.	Edmonton	119	Apr. 22, 1908
McDonald, John D.	Hillcrest	61	Apr. 18, 1907
McNeil, Neil S.	Calgary	68	May 23, 1909
McKinnon, Alex. J.	Lille	82	June 20, 1907
McIntyre, Jos.	Taber	84	July 8, 1907
McGregor, John	Hillcrest	90	Sept. 26, 1907
McNichol, John	Exshaw	103	Jan. 3, 1908
McFayden, John C.	Edmonton	124	Apr. 22, 1908
McIndoe, Wm.	Calgary	136	Aug. 6, 1908
McDonald, John	Lille	172	Oct. 5, 1909
McNair, Arod N.	Lethbridge	175	Nov. 13, 1909
McIvor, Wm. K.	Edmonton	196	Apr. 13, 1910
McAffer, Ronald	Medicine Hat	221	Sept. 24, 1910
McCauley, James	Edmonton	264	Nov. 30, 1911
McKenzie, Norman	Calgary	242	May 20, 1911
McKenzie, Harvey K.	Lethbridge	275	Dec. 19, 1911
McLeod, Herdman	Coleman	302	June 28, 1912
McDonald, John A.	Calgary	327	Nov. 13, 1912
McAulay, Gus Wallace	Coleman	326	Nov. 13, 1912
Munro, Claud	Lethbridge	317	Sept. 17, 1912
Morton, Wm. Johnston	Edmonton	308	June 28, 1912
Nimmmons, Robt.	Lethbridge	*38	Mar. 23, 1900
Nicholson, Robt. John	Edmonton	67	Mar. 20, 1907
Nuttall, Reginald	Edmonton	291	April 25, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Second Class—Continued			
Oxley, John	Taber	6	Sept. 18, 1905
Olson, Harold, P. T.	Calgary	276	Dec. 28, 1911
O'Neil, Edward T.	Edmonton	319	Sept. 20, 1912
Parcels, Timothy E.	Red Deer	6	Sept. 4, 1899
Payzant, Ernest M.	Edmonton	*12	Oct. 9, 1899
Pratt, Geo.	Edmonton	*16	Oct. 9, 1899
Pearce, Abra	Edmonton	*52	May 28, 1904
Pugh, John	Calgary	28	April 30, 1906
Powers, Thos. E.	Strathcona	*246	May 26, 1904
Potter, Martin	Evarts	51	Oct. 5, 1906
Punnett, Lewis, L.	Chesterwold	50	Oct. 4, 1906
Pallot, Herbert J.	Edmonton	144	Sept. 23, 1908
Payzant, H. C.	Edmonton	121	Apr. 22, 1908
Price, John	Edmonton	54	Dec. 19, 1906
Patterson, John M.	Okotoks	108	Mar. 23, 1908
Prince, John E.	Calgary	76	June 4, 1907
Purvils, John	Calgary	106	Feb. 15, 1908
Poole, Fred P.	Strathcona	132	July 9, 1908
Pollock, Daniel R.	Calgary	151	Dec. 2, 1908
Pearson, Augustus	Bellevue	210	Sept. 7, 1910
Potter, John	Calgary	184	Mar. 7, 1910
Pitts, Wm. S.	Edmonton	180	Jan. 10, 1910
Pallot, Harold E.	Edmonton	191	Apr. 6, 1910
Payne, Geo.	Lethbridge	223	Oct. 20, 1910
Petrie, Robt. F.	Elcan	219	Sept. 16, 1910
Patterson, Samuel F.	Granum	254	Oct. 18, 1911
Pollitt, Nicholas T.	Taber	247	July 13, 1911
Pearce, William C.	Edmonton	249	Aug. 24, 1911
Pollock, Frederick	Edmonton	253	Sept. 9, 1911
Palmer, John C.	Edmonton	262	Nov. 28, 1911
Peterson, J. Anderson	Edmonton	263	Nov. 29, 1911
Parken, Joseph	Carmen	288	Apr. 4, 1912
Parsons, Alfred J.	Royal City	318	Sept. 17, 1912
Reed, R. W.	Lethbridge	*5	June 30, 1899
Richards, Hy. John	Canmore	*30	Feb. 13, 1900
Rankin, Thos. Hy.	Banff	*77	Sept. 29, 1900
Roberts, Wm. B.	Fort Saskatchewan	*235	May 18, 1904
Ritchie, Wm. A.	Calgary	141	Sept. 22, 1908
Rich, John H.	Calgary	69	June 3, 1907
Relton, Ole	Lethbridge	115	Apr. 8, 1908
Riddell, Arthur	Calgary	140	Sept. 22, 1908
Rice, Robt.	Calgary	222	Oct. 11, 1910
Richardson, Thos.	Calgary	220	Sept. 23, 1910
Ray, Arthur R.	Edmonton	199	May 11, 1910
Rennie, Thomas	Millet	265	Dec. 8, 1911
Ross, Dexter A.	Strathcona	306	June 28, 1912
Ryan, Harry	Frank	313	Aug. 12, 1912
Richardson, Ernest	Calgary	299	May 22, 1912
Schatz, Wm. H.	Strathcona	*17	Oct. 19, 1899
Shaw, M. W. S.	Midnapore	*27	Dec. 1, 1899
Stafford, Geo.	Lethbridge	160	Aug. 20, 1909
Steven, Hutton	Calgary	*43	Apr. 17, 1900
Stagg, Geo.	Calgary	*112	Feb. 7, 1901
Steven, Alfred E.	Calgary	*113	Feb. 7, 1901
Shelley, Henry Jas.	Calgary	*116	Mar. 12, 1901
Sloan, Wm.	Lethbridge	*169	July 30, 1902
Siemens, Peter	Anthracite	34	May 14, 1906
Stewart, John A.	Red Deer	12	Jan. 2, 1906

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Second Class—Continued			
Shannon, Jas.	Calgary.	*223	Nov. 6, 1903
Shackleton, Thos. A.	Kamloops	*224	Nov. 14, 1903
Starkey, Geo. J.	Ponoka	9	Nov. 2, 1905
Stokes, Robt. D.	Strathcona	19	Apr. 11, 1906
Stacey, Fredk. H.	Edmonton	1	Sept. 18, 1905
Shore, John P.	Edmonton	3	Sept. 18, 1905
Slingsby, Sidney	Calgary	74	June 3, 1907
Stanley, Chas. H.	Bankhead	32	May 14, 1906
Sefton, Fredk.	Lethbridge	39	Aug. 10, 1906
Stanley, Benj. F.	Calgary	47	Aug. 14, 1906
Syer, Thos. M.	Red Deer	94	Oct. 22, 1907
Stockdale, Thos. D.	Lethbridge	133	July 31, 1908
Simpson, Wm.	Coleman	167	Sept. 18, 1909
Sparber, Chas. H.	Lethbridge	177	Nov. 24, 1909
Searle, Wm.	Coal City	179	Dec. 4, 1909
Simondson, Hy.	Northern	197	Apr. 13, 1910
Smith, Fredk.	Coleman	215	Sept. 12, 1910
Schaumleffel, Clifford C.	Lloydminster	192	Apr. 6, 1910
Steven, John C. S.	Edmonton	204	June 22, 1910
Smith, Wm. J.	Milk River	225	Nov. 17, 1910
Scott, David S.	Coleman	256	Oct. 24, 1911
Simpson, John T.	Coleman	252	Sept. 8, 1911
Sinclair, Walter W. P.	Medicine Hat	236	Apr. 12, 1911
Saunders, Michael J.	Cardiff	267	Dec. 12, 1911
Seymour, Francis E.	Macleod	257	Oct. 24, 1911
Stobbs, John	Lethbridge	251	Sept. 9, 1911
Sowerby, William N.	Taber	258	Oct. 24, 1911
Stephenson, Jno. Leach	Lethbridge	239	Apr. 24, 1911
Stephenson, Harry	Medicine Hat	245	June 20, 1911
Singer, Wm. George	Edmonton	270	Dec. 12, 1911
Stirling, James	Michel	287	Mar. 18, 1912
Spargo, John	Edmonton	277	Jan. 12, 1912
Stratton Claude	Edmonton	310	July 22, 1912
Shaw, Thomas	Edmonton	295	May, 14, 1912
Tabacchi, Stephen	Lethbridge	186	Mar. 15, 1910
Toreson, Thos.	Wetaskiwin	*31	Mar. 7, 1900
Thompkins, Peter	White Fish Lake	*98	Nov. 27, 1900
Tasker, Henry A.	Nanton	148	Oct. 15, 1908
Taddrew, Henry P.	Edmonton	29	May 10, 1906
Turner, Duncan	Edmonton	98	Nov. 26, 1907
Thorley, James	Taber	101	Dec. 26, 1907
Turner, Stephen F.	Taber	102	Dec. 26, 1907
Terry, Frank A.	Strathcona	171	Dec. 29, 1909
Taylor, Percy E.	Taber	145	Oct. 6, 1908
Thompson, James	Innisfail	162	Aug. 24, 1909
Turner, Jas. Abbot	Taber	304	June 28, 1912
Thomas, David Rees	Lethbridge	328	Nov. 13, 1912
Taylor, Gilbert	Edmonton	280	Feb. 8, 1912
Von Wendel, Carl	Calgary	*222	Nov. 6, 1903
Van Haast, Julius H.	Strathcona	*278	Nov. 5, 1904
Voss, Edwin E.	Fort Saskatchewan	128	May 7, 1908
Vincent, Robt. G.	Blairmore	155	May 26, 1909
Varden, Anthony L.	Edmonton	158	July 5, 1909
Von Keekem, Barend J.	Medicine Hat	237	Apr. 12, 1911
Vaughan, Wm. Lyle	Calgary	243	May 20, 1911
Varlow, Hy. John	Edmonton	268	Dec. 12, 1911
Walker, J. B.	Lethbridge	*3	June 30, 1899
Watson, Ernest P.	Strathcona	*18	Oct. 9, 1899

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Second Class—Continued			
White, Jas.	Cahmore	*73	Sept. 5, 1906
Websdale, Francis	Edmonton	*139	June 21, 1901
Waldock, John G.	Medicine Hat	*170	Aug. 18, 1902
Waddell, O. S.	Edmonton	*245	May 26, 1904
Wright, Geo. W.	Calgary	73	June 3, 1907
Wilcox, Jas. E.	Coleman	125	Apr. 22, 1908
Walburton, John	Spring Point	8	Sept. 18, 1905
Williams, John	Edmonton	23	Apr. 30, 1906
Wilson, R. J.	High River	80	June 19, 1907
Webb, Jas. F.	Exshaw	143	Sept. 22, 1908
Walker, Thos.	Coleman	46	Aug. 14, 1906
Wilkinson, Robt.	Calgary	142	Sept. 22, 1908
Walker, Rolf A.	Edmonton	205	July 16, 1910
Warr, Percy J. H.	Lethbridge	227	Dec. 8, 1910
Winter, Archibald	Strathcona	202	June 1, 1910
Walton, John W.	Edmonton	233	Mar. 31, 1911
Willis, Robert I.	Edmonton	269	Dec. 12, 1911
Ward, John	Edmonton	330	Dec. 13, 1912
Wood, Jas.	Bellevue	279	Jan. 16, 1912
Will, Frank Silver	Edmonton	284	Mar. 14, 1912
Williams, Richard	Medicine Hat	289	Apr. 6, 1912
White, William	Lethbridge	305	June 28, 1912
Weir, John	Edmonton	307	June 28, 1912
Young, Geo.	Lille	43	Aug. 11, 1906
Zurlinder, John	Calgary	138	Sept. 14, 1908
Third Class			
Albertson, Andrew O.	Strathcona	*135	June 25, 1901
Aikman, Geo.	Calgary	*274	Sept. 11, 1902
Allan, Albert	Edmonton	*360	May 3, 1903
Allan, Arthur	Edmonton	*526	Apr. 18, 1904
Ashcroft, Joseph	Lethbridge	*673	Nov. 24, 1904
Akey, Chas. S.	Iowalta	*759	Mar. 24, 1905
Archibald, Chester H.	Wetaskiwin	*786	Mar. 27, 1905
Ambler, David	Wetaskiwin	*790	Mar. 27, 1905
Anderson, Andrew Wm.	Wetaskiwin	*794	Mar. 27, 1905
Adair, James E.	Edmonton	263	Apr. 18, 1907
Agar, Chas.	Edmonton	143	May 29, 1906
Adshead, Herb. B.	Olds	149	May 31, 1906
Anderson, John J.	Stavely	192	Aug. 13, 1906
Alexander, J. A.	Livingstone	203	Aug. 13, 1906
Abraham, W. R.	Lacombe	242	Sept. 28, 1906
Adams, David C.	Edmonton	207	Sept. 8, 1906
Auld, John	Edmonton	266	Apr. 30, 1907
Anderson, G. A.	Bowden	318	May 29, 1907
Anderson, Jas. J.	Crossfield	324	May 29, 1907
Anstett, Frank A.	Langdon	337	June 4, 1907
Andrews, W. H.	Stewartwyn	364	June 7, 1907
Adams, Chas. W.	Lacombe	367	June 7, 1907
Antrobus, Wm.	Edmonton	386	June 14, 1907
Anderson, Henry	Rosenroll	393	June 14, 1907
Anderson, Wm.	Killam	399	June 14, 1907
Anderson, Ed. A.	Heatherbrae	402	June 14, 1907
Ambler, Geo. D.	Wetaskiwin	411	June 14, 1907
Allan, Harrold	Calgary	563	Jan. 30, 1908
Amdhal, Theo. J.	Seven Persons	2172	Apr. 23, 1912
Archibald, Syl. C.	Ferry Bank	691	May 5, 1908
Alveberry, Fred S.	Wetaskiwin	699	May 7, 1908

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Atterbury, Chas. J.	Edmonton	733	Sept. 18, 1908
Asper, A.	Merna	782	Sept. 18, 1908
Ashcroft, John	Lethbridge	844	Oct. 6, 1908
Anderson, Aitken, McK.	Calgary	811	Mar. 19, 1909
Adring, Tom	Lethbridge	898	Mar. 24, 1909
Atkins, Ralph P.	New Dayton	899	Mar. 24, 1909
Aveldson, August	Sunny Slope	906	Mar. 26, 1909
Annable, Bolton A.	Claresholm	965	Apr. 16, 1909
Anderson, Edward	Sterling	988	Apr. 20, 1909
Aldridge, Oliver	Cardston	1005	Apr. 25, 1909
Arrison, Orrin S.	Gleichen	1017	Apr. 28, 1909
Anderson, Orile H.	Sterling	1109	Sept. 15, 1909
Adams, Daniel P.	Lacombe	1173	Oct. 13, 1909
Ashburner, Edward	Lethbridge	1214	Mar. 15, 1910
Alspach, Wm. L.	Stavely	1273	Mar. 29, 1910
Anderson, Alex.	Granum	1280	Mar. 30, 1910
Anderson, John H.	Round Hill	1283	Apr. 1, 1910
Atkins, C. C. L.	New Dayton	1356	Apr. 14, 1910
Anderson, Geo. H.	Barnwell	1367	Apr. 15, 1910
Aaring, Ben	Burdett	1377	Apr. 19, 1910
Allen, Ewart G.	Medicine Hat	2173	Apr. 23, 1912
Ansley, Harvey, R. B.	Medicine Hat	1390	Apr. 25, 1910
Allen, Richard	Lethbridge	1421	June 11, 1910
Aitken, Jas.	Lethbridge	2055	Mar. 13, 1912
Allan, Robt.	Calgary	1519	Sept. 23, 1910
Alger, Geo. V.	Medicine Hat	2174	Apr. 23, 1912
Ameson, Sigurd A.	Eagle Hill	1550	Oct. 1, 1910
Atkinson, Wm. E.	Claresholm	1641	Mar. 15, 1911
Atkinson, Louis E.	Claresholm	1642	Mar. 16, 1911
Arbuster, John	Stony Plain	1694	Mar. 31, 1911
Aitcheson, Geo.	Green Lawn	1695	Mar. 30, 1911
Ainsley, Wm. G.	Bashaw	1712	Apr. 5, 1911
Anderberg, Claus E.	Bassano	1849	June 13, 1911
Anderson, Victor	Granum	1874	July 13, 1911
Allen, Richard	New Dayton	1974	Oct. 24, 1911
		2418	Nov. 13, 1912
Atkinson, Thos.	Little Volga	1987	Nov. 10, 1911
Arm, William F.	Lethbridge	2032	Feb. 14, 1912
Anderson, Carl	Taber	2056	Mar. 13, 1912
Albert, Max	Berseker	2123	Apr. 4, 1912
Audland, Andrew	Carlstadt	2124	Apr. 4, 1912
Archambio, Fred	Rosemead	2155	April 19, 1912
Allender, Loren L.	Lille	2242	May. 2, 1912
Albertson, P. L.	Edmonton	2327	July 16, 1912
Armstrong, Alex.	Red Deer	2396	Oct. 16, 1912
Blatchford, Peter	Edmonton	*37	Nov. 28, 1899
Bawtinheimer, H. E.	Red Deer	*185	Dec. 18, 1901
Billo, Jos.	Edmonton	*193	Dec. 18, 1901
Bernier, Alexis	Lamoureux	*205	Dec. 18, 1901
Berlinguette, Alfred	Whitford	*255	Aug. 18, 1902
Burwell, Arthur P.	Edmonton	*354	Apr. 24, 1903
Berg, John	Fort Saskatchewan	*356	May 13, 1903
Bolduc, Jos.	Beaumont	*362	May 13, 1903
Bowers, Richard J.	Strathcona	*364	May 13, 1903
Briggs, M. R.	Red Deer	*371	May 13, 1903
Bricker, Menno C.	Okotoks	*471	Nov. 6, 1903
Brown, Robert S.	Lamoureux	*480	Jan. 15, 1904
Burbank, Lyle A.	Calgary	*483	Feb. 10, 1904
Billow, Adolph	Canmore	*486	Mar. 14, 1904
Bailey, R. B.	Edmonton	*527	Apr. 18, 1904

*Indicates Certificate was granted by North-West Territories.

**SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—Continued.**

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Brenton, J. R.	Edmonton	*544	Apr. 18, 1904
Bolduc, Peter	Beaumont	*638	Oct. 15, 1904
Bevington, Geo. E.	Strathcona	*642	Oct. 15, 1904
Browne, Thos. J.	Medicine Hat	*83	Apr. 9, 1906
Brown, John, jr.	Innisfail	*757	Mar. 24, 1905
Bruce, Chas. R.	Lacombe	*761	Mar. 24, 1905
Blewett, Wm. G.	Mewassin	*818	Apr. 14, 1905
Bauehin, Theophile	Legal	*214	Aug. 14, 1906
Brunelle, John	Beaumont	*821	Apr. 14, 1906
Brodie, Wm. A.	Ponoka	*848	May 30, 1905
Blanchette, Peter	Fort Saskatchewan	257	Dec. 28, 1906
Bradbeer, Edwd.	Lethbridge	14	Sept. 16, 1905
Bilson, Wm. Jas.	Lethbridge	16	Sept. 16, 1905
Baker, Chas. L.	East Clover Bar	27	Sept. 16, 1905
Blittner, Anton	Ponoka	56	Nov. 11, 1905
Bell, Harry	Daugh	71	Mar. 16, 1906
Baker, Thos.	Calgary	72	Mar. 19, 1906
Boote, Edwd.	Pine Lake	107	Apr. 24, 1906
Godman, John A.	Calgary	885	Mar. 18, 1909
Bartlett, Percy R.	Edmonton	142	May 29, 1906
Burns, David	Grassy Lake	170	Aug. 11, 1906
Baden, Wm. F.	High River	196	Aug. 13, 1906
Benz, August J.	Mundare	216	Sept. 13, 1906
Bates, Minor	Strathcona	2357	July 19, 1912
Brown, A. J.	Wavy Lake	232	Sept. 21, 1906
Bucher, L. W.	Wetaskiwin	273	May 15, 1907
Berg, John P.	Wetaskiwin	280	May 15, 1907
Barr, Ralph	Edmonton	286	May 15, 1907
Beggs, John	Innisfail	295	May 20, 1907
Buckton, Henry J.	Olds	302	May 23, 1907
Bugton, Ole G.	Harmattan	304	May 23, 1907
Bergen, Jacob	Didsbury	319	May 29, 1907
Bush, Frank C.	Didsbury	323	May 29, 1907
Barker, Wm. L.	Calgary	343	June 4, 1907
Brotherston, Robt. A.	Calgary	345	June 4, 1907
Barnes, Wm. J.	Calgary	346	June 4, 1907
Brown, Wilfred B.	Calgary	359	June 4, 1907
Bush, Henry	Blackfalds	366	June 7, 1907
Brereton, Thos. A.	Valley City	376	June 7, 1907
Brown, Wm. H.	Edmonton	385	June 14, 1907
Berry, Robt. G.	Fort Saskatchewan	392	June 14, 1907
Bradbury, Arthur T.	Edberg	398	June 14, 1907
Batke, Albert L.	Ferry Point	417	June 14, 1907
Bucker, Walter L.	Mossleigh	424	June 19, 1907
Brower, Archd. B.	Pincher Creek	928	Apr. 1, 1909
Black, Robt.	Strathcona	479	July 24, 1907
Boomer, Marshall	Blackfalds	481	July 27, 1907
Bowman, Albert	Strathcona	485	Aug. 28, 1907
Brickman, Jos. T.	Pembina	495	Oct. 15, 1907
Bell, Wm. G.	Red Deer	515	Oct. 22, 1907
Bergen, Henry	Didsbury	527	Oct. 24, 1907
Burchinal, Frank N.	Bluff Centre	543	Oct. 28, 1907
Bawlaugh, John J.	Calgary	559	Jan. 20, 1908
Burwell, Wm.	Gladys	569	Mar. 23, 1908
Blair, Geo. R.	Claresholm	570	Mar. 23, 1908
Base, John L.	Reid Hill	572	Mar. 23, 1908
Bell, Wm. F.	High River	573	Mar. 23, 1908
Blackorby, W. G.	Claresholm	575	Mar. 23, 1908
Bowerman, Cliff	Cowley	599	Apr. 8, 1908
Banfield, J. Frank	Lethbridge	626	Apr. 9, 1908

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Bryant, Percy B.	Lethbridge	627	Apr. 9, 1908
Brown, John	Evarts	635	Apr. 14, 1908
Beckett, Waitland J.	Red Deer	636	Apr. 14, 1908
Brubaker, Albert J.	Medicine Hat	1376	Apr. 18, 1910
Burke, Benj. S.	Lacombe	693	May 6, 1908
Bader, Benj. H.	Lethbridge	704	May 14, 1908
Bateman, Ewart W.	Lethbridge	744	Aug. 6, 1908
Baxter, John	Red Deer	751	Sept. 3, 1908
Blacklock, Robt. O.	Westward Ho	754	Sept. 8, 1908
Butts, John H.	Olds	755	Sept. 8, 1908
Brooke, Fredk. C.	Olds	759	Sept. 11, 1908
Ball, Arthur	Mayville	767	Sept. 14, 1908
Burns, Wm.	Higgins	768	Sept. 14, 1908
Bowick, Chas. C.	Tofield	810	Sept. 28, 1908
Bowick, John D.	Tofield	811	Sept. 28, 1908
Brown, John	Kitscoty	812	Sept. 28, 1908
Brainard, Jerome W.	Nanton	824	Oct. 2, 1908
Bowler, Thos. H.	Macleod	845	Oct. 6, 1908
Benjamin, Albert	Morinville	862	Oct. 20, 1908
Bucknam, Artliff V.	Bucknam	869	Nov. 23, 1908
Brenton, Chas. J.	Edmonton	871	Dec. 23, 1908
Bannerman, Wm.	Red Deer	*189	Dec. 18, 1901
Boomer, Alonzo	Lacombe	57	Nov. 22, 1905
Bartholomew, Claude D.	Morinville	886	Mar. 13, 1909
Barley, Chas.	Mountain House	887	Mar. 20, 1909
Bratz, Emil	Pincher Creek	1626	Mar. 11, 1911
Bessey, Alfred	Stettler	961	Apr. 13, 1909
Bell, David J.	High River	966	Apr. 16, 1909
Bailey, Geo.	Magrath	994	Apr. 22, 1909
Burton, Edar W.	Calgary	1004	Apr. 23, 1909
Bell, Andrew J.	Shepard	1018	Apr. 28, 1909
Brantz, Albert A.	Mewassin	1036	Apr. 28, 1909
Baumbach, John	Irvine	1046	May 1, 1909
Bishop, Frank E.	Medicine Hat	1047	May 1, 1909
Barnes, Edward	Edmonton	1061	May 21, 1909
Brown, Geo. C.	Edmonton	1077	May 26, 1909
Bakken, Nels O.	Iron Springs	1078	May 28, 1909
Benson, Roy	Calgary	1080	June 8, 1909
Buchanan, Wm. E.	Nanton	1907	Aug. 24, 1911
Baker, Bernard S.	Nanton	1115	Sept. 21, 1909
Burr, John C.	Calgary	1116	Sept. 21, 1909
Betton, Thos. W.	High River	1140	Sept. 21, 1909
Boyle, Jas. E.	Blairmore	1684	Mar. 29, 1911
Bercyz, Julius	Edmonton	1976	Oct. 24, 1911
Benson, Geo.	Taber	1151	Sept. 28, 1909
Bjor, Frank	Calmar	1158	Sept. 29, 1909
Black, Andrew	Edmonton	1171	Oct. 9, 1909
Bradley, Harold R.	Wetaskiwin	1176	Nov. 5, 1909
Barley, Jack E.	Edmonton	1181	Nov. 16, 1909
Burness, Hy.	Edmonton	1191	Jan. 10, 1910
Bouyea, Arthur	Calgary	1193	Feb. 3, 1910
Berwick, Albert E.	Red Deer	1196	Mar. 4, 1910
Beamer, Frank A.	Calgary	1203	Mar. 7, 1910
Bishop, Harvey M.	Calgary	1204	Mar. 7, 1910
Blackstock, John	Calgary	1204	Mar. 7, 1910
Bonnieman, Wm.	Lethbridge	1215	Mar. 15, 1910
Buchring, Wm.	Winnifred	1216	Mar. 15, 1910
Barbin, M. J.	Coaldale	1217	Mar. 15, 1910
Baker, Thos. R.	Magrath	1218	Mar. 15, 1910
Beatty, Ed. S.	Lethbridge	1219	Mar. 15, 1910

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Bryant, Arthur	Lethbridge	1220	Mar. 15, 1910
Brown, Thos.	Frank	2069	Mar. 18, 1912
Baird, Sam	Blairmore	1625	Mar. 11, 1911
Bochnlein, Galuss J.	Macleod	1636	Mar. 15, 1911
Buck, Herbt. W.	Kitscoty	1302	Apr. 6, 1910
Buckler, Eric W.	Black Diamond	1322	Apr. 8, 1910
Buck, Alphasus B.	Okotoks	1323	Apr. 8, 1910
Brown, Archie B.	Acme	1334	Apr. 11, 1910
Bowman, Elra	Halkirk	1284	Apr. 1, 1910
Bonallo, Herbert D.	Calgary	1381	Apr. 21, 1910
Bonallo, Keir	Calgary	1382	Apr. 21, 1910
Babe, Richard	Whitla	1391	Apr. 25, 1910
Byron, J. Hercule	Edmonton	1417	May 13, 1910
Barr, John	Calgary	1418	June 2, 1910
Bent, Wm. K.	Coleman	1441	July 14, 1910
Brown, deWitt E.	Bellshill	1460	Aug. 15, 1910
Bryce, Wm.	Davisburg	1485	Sept. 6, 1910
Bree, Ernest N.	Edmonton	1491	Sept. 13, 1910
Burton, Francois J.	Edgerton	1492	Sept. 16, 1910
BratvoId, Oscar	Dina	1493	Sept. 16, 1910
Barstad, Sanders E.	Lee Creek	1494	Sept. 16, 1910
Brattell, Jas. E.	Calgary	1520	Sept. 23, 1910
Brown, Geo. J.	Granum	1539	Oct. 3, 1910
Brubaker, Jonas	Mayton	1551	Oct. 17, 1910
Barrett, Alfred	Ponoka	1556	Oct. 17, 1910
Burton, Fredk. H.	Strathcona	1559	Oct. 19, 1910
Brown, Fredk. H.	Medicine Hat	1563	Oct. 20, 1910
Brown, Robt.	Lundbreck	1575	Oct. 20, 1910
Bradley, Harold	Bassano	1579	Nov. 14, 1910
Byers, Elmer L.	New Dayton	1858	June 20, 1912
		1583	Nov. 17, 1910
Bailey, Evans	Coleman	1776	Apr. 24, 1911
		1584	Nov. 17, 1910
Bridge, Ray C.	Calgary	1590	Dec. 8, 1910
Borrows, Wm.	Lethbridge	2244	May 1, 1912
Bond, Newton	Mannville	1593	Dec. 10, 1910
Bowerman, Cliff	Cowley	1635	Mar. 15, 1911
Brouse, Jason W.	Calgary	1608	June 23, 1911
Bergman, Jos. A.	Lethbridge	1610	Mar. 7, 1911
Bennett, Fred C.	Hillcrest	2072	Mar. 18, 1912
Brubaker, Isaac	Airdrie	1646	Mar. 20, 1911
Brown, Jno. E.	Calgary	1647	Mar. 20, 1911
Bye, Martin	Lilloo	1670	Mar. 24, 1911
Bullman, Jno. E.	Warner	1685	Mar. 29, 1911
Berrigan, Steve	Bassano	1671	Apr. 19, 1911
Brougham, Wm. J.	Calgary	1762	Apr. 19, 1911
Bennifield, Jno. G.	Rosyth	1713	Apr. 5, 1911
Broachen, Wm. H.	Medicine Hat	1731	Apr. 7, 1911
Bellew, Geo. L.	Medicine Hat	1750	Apr. 15, 1911
Baumbach, Jacob I.	Irvine	1751	Apr. 15, 1911
Burnett, Elmer	Faber	1777	Apr. 24, 1911
Braumberger, Fred C.	Berseker	1801	May 6, 1911
Barnes, Jos.	Bassano	1817	May 20, 1911
Bell, John F.	Lethbridge	1825	May 26, 1911
Berg, Carl M.	Calgary	1848	June 13, 1911
Bradshaw, R. Davis	Edmonton	1868	June 21, 1911
Bennett, Wm. D.	Strathmore	1879	July 15, 1911
Bowler, Herbert A.	Edmonton	1888	Aug. 16, 1911
Branning, L. E.	Bow Island	1906	Aug. 24, 1911
Burns, Robt. W.	Holmglen	1926	Sept. 27, 1911

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Bartman, Geo. V.	Castor	1927	Sept. 7, 1911
Butters, Hy. G.	Airdrie	1931	Sept. 7, 1911
Bowen, Robt.	Strathcona	1953	Sept. 9, 1911
Baiers, Peter	Edmonton	1963	Oct. 18, 1911
Boler, Thos. A.	Keoma	1967	Oct. 20, 1911
Blades, Geo.	Stirlingville	1968	Oct. 20, 1911
Braithwaite, Harry	Lethbridge	1975	Oct. 24, 1911
Blake, Jas. H.	Calgary	2005	Dec. 2, 1911
Brennan, Fred	Edson	2007	Dec. 12, 1911
Brown, William	Coleman	2071	Mar. 18, 1912
Briggs, Myron W.	Barons	2090	Mar. 22, 1912
Boisvert, Antoine A.	Legal	2095	Mar. 25, 1912
Bruce, Geo. B.	Cardiff	2096	Mar. 25, 1912
Barnum, Louis O.	Acme	2108	Mar. 28, 1912
Baker, Elmer	Champion	2148	Apl. 16, 1912
Benson, Elmer A.	Brunetta	2149	Apl. 16, 1912
Bland, Harry O.	Taber	2156	Apl. 19, 1912
Bransen, John J.	Spring Lake	2163	Apl. 20, 1912
Bonnieman, John	Seven Persons	2175	Apl. 23, 1912
Bissett, Robert B.	Gainsford	2192	Apl. 24, 1912
Bissell, Chas. M.	Gilpin	2193	Apl. 24, 1912
Beers, John	Calgary	2202	Apl. 26, 1912
Bibby, Reginald	Pine Creek	2235	Apl. 29, 1912
Baird, Peter A.	Edmonton	2410	Oct. 23, 1912
Burgess, Geo. G.	Lake View	2250	May 3, 1912
Birnel, Ernest E.	Sunnyslope	2251	May 3, 1912
Burnette, Fred N.	Calgary	2271	May 22, 1912
Boulet, John	Calgary	2272	May 22, 1912
Brennan, Cornelius	Bassano	2273	May 22, 1912
Bush, John Thomas	Edmonton	2308	June 17, 1912
Bird, Jos. Samuel	Edmonton	2326	July 12, 1912
Bronsema, Emanuel	Edmonton	2328	July 16, 1912
Buttress, Clement	Noyes Crossing	2329	July 16, 1912
Bristo, Wm. Geo.	Calgary	2338	July 18, 1912
Blix, Jno. A.	Calgary	2372	Sept. 19, 1912
Brown, James	Calgary	2404	Oct. 19, 1912
Bradshaw, Alfred	Calgary	2405	Oct. 19, 1912
Bailey, Peter	Edmonton	2422	Dec. 13, 1912
Baynton, Edward	Wainwright	2423	Dec. 13, 1912
Currie, L.	Strathcona	*23	Oct. 9, 1899
Cameron, John	Edmonton	*25	Oct. 9, 1899
Carscadden, F. W.	Strathcona	*45	Mar. 7, 1900
Clink, Geo. J.	Lacombe	*115	Dec. 31, 1900
Campbell, Michel	Canmore	*141	May 1906
Cruikshank, Chas.	Red Deer	*186	Dec. 18, 1901
Clauson, John	Red Deer	*231	Apr. 23, 1902
Currie, Wm.	Medicine Hat	*256	Aug. 18, 1902
Currie, Arch'd	Medicine Hat	*406	Aug. 23, 1903
Calhoun, Culver	Calgary	*488	Mar. 14, 1904
Curtis, W. W.	Carstairs	*551	Dec. 20, 1904
Coulter, Frank	Edmonton	*528	Apr. 18, 1904
Cunningham, J. E.	Ellerslie	*529	Apr. 18, 1904
Clark, W. A.	Edmonton	*530	Apr. 18, 1904
Charlette, Clifford	Beaumont	*634	Oct. 15, 1904
Cote, Jos.	Beaumont	*637	Oct. 15, 1904
Crichton, David O.	Lethbridge (dup.)	*59	Dec. 2, 1905
Carpenter, David	Pincher Creek	*679	Dec. 9, 1904
Cummins, Walter J. C.	Calgary	*743	Mar. 16, 1905
Colter, Chas.	Medicine Hat	*860	June 14, 1905

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Converse, E.	Ponoka	55	Nov. 16, 1905
Campou, Denis	St. Albert	82	Mar. 26, 1906
Clausen, Daniel	Evarts	106	Apr. 24, 1906
Cartwright, Geo.	Calgary	116	April 30, 1906
Cooper, Wm. S.	Calgary	126	Apr. 30, 1906
Craig, James T.	Edmonton	144	May 29, 1906
Colwell, Frank L.	Didsbury	152	May 31, 1906
Craig, Mert E.	Markerville	158	May 31, 1906
Clark, Jas. E.	Taber	172	Aug. 11, 1906
Clark, O. S.	Meadow Creek	1087	Oct. 20, 1909
Carcaden, Arthur	Nanton	194	Aug. 13, 1906
Charboneau, Len	Fort Saskatchewan	213	Sept. 13, 1906
Camfield, Ernest L.	Stettler	229	Sept. 20, 1906
Chabot, Jos.	Edmonton	235	Sept. 20, 1906
Coghill, Albert	Red Deer	239	Sept. 27, 1906
Cummings, Wm. J.	Bentley	244	Sept. 27, 1906
Curtis, Homer, G.	Edmonton	265	Apr. 29, 1907
Campbell, Jas. H.	Edmonton	282	May 15, 1907
Code, Jas. A.	Red Deer	296	May 20, 1907
Campbell, Johnson	Innisfail	317	May 29, 1907
Collard, Chas. D.	Mundare	332	May 31, 1907
Cosgrove, Jas. McA.	Calgary	341	June 4, 1907
Carter, John R.	Morningside	368	June 7, 1907
Cox, John	Stettler	369	June 7, 1907
Cunningham, Orvill D.	Vegreville	395	June 14, 1907
Cunningham, Wilber R.	Bawlf	403	June 14, 1907
Campbell, Benj. F.	Edmonton	405	June 14, 1907
Clark, Herbert	Strathcona	418	June 14, 1907
Coates, Robt. A.	Cochrane	441	June 29, 1907
Caplin, Fred C.	Huntsville	467	July 15, 1907
Charters, Ed. J.	Claresholm	469	July 15, 1907
Clemens, Pater F.	Stettler	531	Oct. 28, 1907
Crego, W. E.	Lacombe	537	Oct. 28, 1907
Cook, Wm. D.	Lamerton	565	Feb. 27, 1908
Culp, Geo. W.	Spring Coulee	630	Apr. 9, 1908
Cook, Francis R.	Medicine Hat	659	Apr. 27, 1908
Cutting, Francis R.	Vermillion	676	Apr. 27, 1908
Chambers, John	Lloydminster	710	May 18, 1908
Castian, Desire	Cardiff	774	Sept. 18, 1908
Collard, Richard R.	Edmonton	775	Sept. 18, 1908
Coburn, Alex. F.	Daugh	787	Sept. 21, 1908
Cotterall, John	Calgary	798	Sept. 22, 1908
Clark, Tom	Cochrane	799	Sept. 22, 1908
Carrow, Jos. B.	Calgary	800	Sept. 22, 1908
Cull, Cecil	Vegreville	813	Sept. 28, 1908
Challenger, Alf. E.	Edgerton	814	Sept. 28, 1908
Courtright, Leo.	Maughan	815	Sept. 28, 1908
Carriere, Arthur	High River	825	Oct. 2, 1908
Cody, Wm. H.	High River	826	Oct. 2, 1908
Cousins, Bert	High River	827	Oct. 2, 1908
Cousins, Walter	High River	828	Oct. 2, 1908
Cameron, Geo. M.	Calgary	861	Oct. 10, 1908
Cleave, Geo. M.	Vegreville	865	Oct. 27, 1908
Coffman, Robt.	Frank	868	Nov. 5, 1908
Curey, Wm.	Bowville	892	Mar. 24, 1909
Conibear, Wm. N.	Lethbridge	893	Mar. 24, 1909
Carlson, Carl G.	Didsbury	908	Mar. 26, 1909
Canton, Jules	Edmonton	939	Apr. 3, 1909
Chester, Thos. W.	Macleod	952	Apr. 7, 1909
Christian, Wm. M.	Vermillion	980	Apr. 20, 1909

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Cleven, Nels T.	Killam	995	Apr. 23, 1909
Court, Wm. E.	The Gap	1019	Apr. 28, 1909
Crews, Waldan	Medicine Hat	1048	May 1, 1909
Cathro, Aylmer G.	Lethbridge	1170	Oct. 9, 1909
Cowell, Robt. J.	Edmonton	1062	Oct. 21, 1909
Chalmers, John	Coleman	1110	Sept. 18, 1909
Cartwright, Walter	Frank	1111	Sept. 18, 1909
Cotton, Samuel J.	Coleman	1112	Sept. 18, 1909
rar, James	Edmonton	1179	Nov. 16, 1909
Cuddy, Andrew S.	Hillend	1197	Mar. 3, 1910
Czarkaski, Antonio	Edmonton	1202	Mar. 5, 1910
Campbell, John Chas.	Taber	1221	Mar. 15, 1910
Cimoline, Antonio	Lille	1248	Mar. 21, 1910
Callahan, Jos.	Pincher Creek	1258	Mar. 22, 1910
Cridland, Walter	Summerview	1259	Mar. 22, 1910
Cook, Marshall S.	Pincher Creek	2014	Dec. 19, 1911
Curtis, Claude C.	Macleod	1281	Mar. 30, 1910
Carroll, Thos. C. P.	Vermillion	1303	Apr. 6, 1910
Clay, Elmer	Paradise Valley	1304	Apr. 6, 1910
Cleophas, Leif M.	Coaldale	1313	Apr. 7, 1910
Cady, Lynn	Edmonton	1345	Apr. 13, 1910
Cheyne, Jas.	Edmonton	1405	May 17, 1910
Callfas, Henry	Edmonton	1442	July 14, 1910
Cutlack, Percy	Cowley	1469	Aug. 31, 1910
Cook, Delmer E.	Innisfail	1513	Sept. 21, 1910
Cameron, Jas. D.	Bassano	1521	Sept. 23, 1910
Clennin, Samuel	Bawlf	1541	Oct. 7, 1910
Crawford, Robt.	Barnhill	1564	Oct. 20, 1910
Campbell, Hugh J.	Calgary	1578	Oct. 21, 1910
Clark, Gordon	Strathcona	1581	Nov. 15, 1910
Chapman, Thos.	Lethbridge	1612	Mar. 7, 1911
Chadwick, Emmi	Calgary	1648	Mar. 20, 1911
Czerniawski, Mike	Vegreville	1664	Mar. 22, 1911
Cary, Belbert	Stettler	1671	Mar. 24, 1911
Campbell, Lewis A.	Warner	1686	Mar. 29, 1911
Campbell, Benj.	Warner	1687	Mar. 29, 1911
Coffee, Clinton	Tide Lake	1732	Apr. 10, 1911
Coyle, Ed. S.	Nanton	1763	Apr. 19, 1911
Christian, Neal	Magrath	1778	Apr. 24, 1911
Cox, Orville	Kesma	1802	May 6, 1911
Cleminson, Jer	Calgary	1818	May 20, 1911
Cleminson, Wm.	Calgary	1819	May 20, 1911
Caveny, Howard	Stavely	1859	June 20, 1911
Clock, Alf. L.	River Bow	1860	June 20, 1911
Call, Hubert L.	Wetaskiwin	1870	July 6, 1911
Crinion, Bert	Sundial	1875	July 13, 1911
Cromer, Walter	Edmonton	1889	Aug. 16, 1911
Chatvalre, Jean	Edmonton	1890	Aug. 16, 1911
Cameron, Frank A.	Calgary	1897	Aug. 22, 1911
Carney, Wm. C.	Nanton	1969	Oct. 20, 1911
Caron, Alphonse	Riviere Qu Barre	1985	Oct. 25, 1911
Cowe, George	Edmonton	1988	Nov. 10, 1911
Cook, Wm. R.	Taber	1997	Nov. 17, 1911
Corlett, Wm. Ed.	Edmonton	1768	Apr. 21, 1911
Corlett, Wm. Ed.	Edmonton	2225	Apr. 29, 1912
Carlson, Gus. A.	Battle River	1964	Oct. 18, 1911
Carlson, Gus. A.	Battle River	2287	May 29, 1912
Christie, Wm. W.	Cayley	2025	Jan. 16, 1912
Clegg, Wm. A.	Coleman	2028	Jan. 16, 1912
Corbett, Richard A.	Strathcona	2046	Feb. 23, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Coskey, Clarence J.	Passley	2057	Mar. 13, 1912
Cofell, Lemmy	Ardenville	2070	Mar. 18, 1912
Crapo, George	Bickerdike	2097	Mar. 25, 1912
Clem, John W.	Bragg Creek	2109	Mar. 28, 1912
Crawford, Dan A.	Magrath	2120	Apr. 2, 1912
Collins, Geo. H.	Gleichen	2125	Apr. 4, 1912
Carnahan, Reuben J.	Bassano	2126	Apr. 4, 1912
Cameron, Wm. T.	Sedgewick	2136	Apr. 10, 1912
Conover, Geo. F.	Grassy Lake	2176	Apr. 23, 1912
Collins, John	Calgary	2203	Apr. 26, 1912
Court, Ed. Alfred	Exshaw	2204	Apr. 25, 1912
Card, Herbert	Leslieville	2252	May 3, 1912
Cowger, Daniel L.	Bassano	2299	June 11, 1912
Collyer, Percy E.	Edmonton	2309	June 17, 1912
Copson, Fred W.	St. Albert	2310	June 17, 1912
Cameron, Wm. John	Calgary	2339	July 18, 1912
Craig, James A.	Tilley	2340	July 18, 1912
Chrisman, Frank	Vermillion	2382	Sept. 20, 1912
Cormier, Henry O.	Wetaskiwin	2397	Oct. 16, 1912
Curtis, Lee L.	Edmonton	2412	Nov. 8, 1912
Cox, Arthur	Calgary	2434	Dec. 18, 1912
Crosby, William	Exshaw	2435	Dec. 18, 1912
Delop, Thos.	Frank	*293	Sept. 30, 1902
Dobbs, F. M.	Iowalta	*515	Apr. 18, 1904
Druar, S. P.	Riviere Qui Barre	*532	Apr. 18, 1904
Dubuc, Emile	Morinville	*551	May 26, 1904
Davis, Henry E.	Didsbury	*752	Mar. 24, 1905
Davie, Alvin A.	Calgary	*846	Mar. 26, 1905
Dickson, Jas.	Blairmore	6	Sept. 16, 1905
Dowsett, Nat.	Frank	516	Oct. 22, 1907
Dye, Jas. E.	Ponoka	33	Sept. 16, 1905
Deisting, C. G.	Duhamel	54	Nov. 3, 1905
Dowling, Nelson	Edmonton	90	Mar. 11, 1906
Devillard, Louis	Edmonton	89	Mar. 11, 1906
Drader, Ernest	Lacombe	112	Apr. 25, 1906
Dawes, Albert A.	High River	121	Apr. 30, 1906
Davis, John B.	Edmonton	1183	Nov. 27, 1909
Dickson, Wm. A.	Medicine Hat	167	Aug. 11, 1906
Dickens, Chas.	Lille	183	Aug. 13, 1906
Dance, Walter H.	Innisfail	293	May 20, 1907
Doolan, John T.	Fort Saskatchewan	335	May 31, 1907
Doyle, John L.	Langdon	349	June 4, 1907
Davidson, Peter A.	Calgary	358	June 4, 1907
Drewes, H. F. W.	Mayville	373	June 7, 1907
Davidson, Andrew C.	Lacombe	377	June 7, 1907
Dersch, Anton L.	Leavings	451	July 15, 1907
Dobbie, Alex.	Pincher Creek	929	Apr. 1, 1909
Drury, Wm.	Taber	552	Dec. 26, 1907
Drinnon, Robt. McC.	Calgary	586	Mar. 23, 1908
Deakin, Thos.	Hillcrest	606	Apr. 8, 1908
Dickson, John	Red Deer	640	Apr. 14, 1908
Dehning, Louis H.	Tapscott	649	Apr. 15, 1908
Davis, Geo. O.	Crossfield	680	May 1, 1908
Dowsett, Alfred	North Bank	697	May 7, 1908
Davis, Chris. A.	Lavoy	724	May 18, 1908
Dennis, Glen	Vegreville	726	May 18, 1908
Denner, Jos.	Lesser Slave Lake	737	Aug. 6, 1908
Dunbar, Frank G.	Three Hills	756	Sept. 8, 1908
Dickan, Chas. J. H.	Didsbury	760	Sept. 11, 1908

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Davis, Clarence	Stavely	829	Oct. 2, 1908
Davis, Christopher	Lethbridge	846	Oct. 6, 1908
Dingee, Harry	Lethbridge	867	Oct. 29, 1908
Dangerfield, James A.	Olds	490	Dec. 30, 1909
Donnelly, Henry J.	Wetaskiwin	*784	Mar. 27, 1905
Dawson, John C.	Mountain View	455	July 15, 1907
Denson, Alex. R.	Bankhead	550	Dec. 5, 1907
Duffey, Alfred	Lethbridge	895	Mar. 24, 1909
Bluski, John	Sundial	897	Mar. 24, 1909
Deugan, Hiram W.	Coleman	910	Mar. 30, 1909
Darimont, Jas.	Edmonton	942	Apr. 3, 1909
Dickan, Ferd W.	Ponoka	947	Apr. 17, 1909
Dupmeyer, Jos.	Edmonton	981	Apr. 20, 1909
Davis, Geo. W.	Falstaff	996	Apr. 22, 1909
Duncan, Alexr. D.	Edmonton	1063	May 21, 1909
Dixon, Wm.	Calgary	1117	Sept. 21, 1909
Dickie, Samuel	Lethbridge	1157	Oct. 5, 1909
Davey, John B.	Calgary	1206	Mar. 7, 1910
Dawson, Wm.	Macleod	1267	Mar. 28, 1910
Denike, Geo. H.	Lacombe	1285	Apr. 1, 1910
Davy, Stewart C.	Calgary	1324	Apr. 8, 1910
Davidson, Jas. F.	Calgary	1325	Apr. 8, 1910
David, J. R.	Vegreville	1696	Mar. 13, 1911
Darrow, Mason	Taber	1368	Apr. 15, 1910
Dainger, Orlando	Stirling	1369	Apr. 15, 1910
Dunn, Robt. J.	Calgary	1383	Apr. 21, 1910
Downing, Frank H.	Bassano	1385	Apr. 19, 1910
Dixon, Wm.	Calgary	1415	May 23, 1910
Dow, Alexr.	Lethbridge	1477	Sept. 1, 1910
Dredge, Wm. H.	Edmonton	1495	Sept. 16, 1910
Dow, Jas.	Lethbridge	1613	Mar. 7, 1911
Dixon, Geo. W.	Macleod	1638	Mar. 15, 1911
Davis, Wallace H.	Calgary	1649	Mar. 20, 1911
Dearden, Simon	Three Hills	1650	Mar. 20, 1911
De Wolfe, Wilburn	Sanderville	1672	Mar. 24, 1911
Dewar, Alex. K.	Fort Saskatchewan	1769	Apr. 21, 1911
Dankwerth, Wm. L.	Gleichen	1733	Apr. 10, 1911
Desler, Hy. C.	Stavely	1779	Apr. 24, 1911
Dunn, Chas. W.	Calgary	1803	May 6, 1911
Downham, Mark	Calgary	1804	May 6, 1911
Davison, H. Y.	Rexboro	1813	May 18, 1911
Damman, Wm.	New Dayton	1826	May 26, 1911
Davis, Wm. A.	Edmonton	1895	Aug. 18, 1911
Doten, Earl B.	Calgary	1932	Sept. 8, 1911
DeVore, Harley G.	Edmonton	1960	Sept. 30, 1911
Dow, Gavin, M.	Lethbridge	1998	Nov. 17, 1911
Davis, Alfred J.	Lethbridge	2015	Dec. 19, 1911
Desler, Geo. C.	Nanton	1274	Mar. 29, 1910
Desler, Geo. C.	Nanton	2110	Mar. 28, 1912
Draper, Harry	Calgary	2085	Mar. 14, 1912
Diemert, Eugene	Stavely	2091	Mar. 22, 1912
Dubuc, Arthur	Morinville	2098	Mar. 25, 1912
Dunn, Gerald A.	Crowfoot	2127	Apr. 4, 1912
Dyvig, Jacob	Carlstadt	2128	Apr. 4, 1912
Davis, Newton	Bassano	2129	Apr. 4, 1912
Dale, Lewis	Hayter	2137	Apr. 10, 1912
Dobson, Fred. J.	Camrose	2164	Apr. 20, 1912
Davidson, Wm. H.	Lloydminster	2195	Apr. 24, 1912
Dowsett, Edward J.	Whastao	2229	Apr. 29, 1912
Dawson, Frank B.	Bassano	2274	May 23, 1912

*Indicates Certificate was granted by North-West Territories.

**SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—Continued.**

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Duffy, James T.	Strathmore	2300	June 11, 1912
Dillabough, Jacob	Edmonton	2311	June 17, 1912
Day, Ira J.	Edmonton	2381	Sept. 20, 1912
Davern, Joseph P.	Calgary	2391	Oct. 7, 1912
Drummond, John Wm.	Calgary	2392	Oct. 7, 1912
Dalglish, Thos. R.	Red Deer	2416	Nov. 12, 1912
Dowell, James H.	Edmonton	2424	Dec. 13, 1912
Davison, John W.	Calgary	2436	Dec. 18, 1912
Edgerton, Guy	Red Deer	*184	Dec. 18, 1901
Evarts, Lucius P.	Calgary	*394	Aug. 14, 1903
Evarts, Philo	Banff	*490	Mar. 4, 1904
Edmonds, Thos. J.	Edmonton	*803	Mar. 31, 1905
Enbody, Chas. S.	Calgary	125	Apr. 30, 1906
Ennes, John Jas.	Innisfail	147	May 31, 1906
Ewart, David	Strathcona	219	Sept. 13, 1906
Endersby, Jos. P.	Medicine Hat	261	Apr. 6, 1907
Engen, Anton A.	Sunny Slope	311	May 29, 1907
Eggenberger, John K.	Coalbanks	327	May 29, 1907
Elliott, John	Calgary	353	June 4, 1907
East, Alfred E.	Strathcona	1436	July 7, 1910
Ensminger, Louis C.	Lacombe	400	June 14, 1907
Erratt, Wm. H.	Nanton	419	June 19, 1907
Emmerson, Robt.	Bellevue	911	Mar. 30, 1907
Ellis, John W.	Edmonton	492	Oct. 15, 1907
Elliott, Henry N.	Carstairs	536	Oct. 28, 1907
Euard, Arthur W.	Calgary	556	Jan. 20, 1908
Elmhirst, Jos. A.	High River	584	Mar. 23, 1908
Eiseman, Jos.	Peace River Crossing..	738	Aug. 6, 1908
Ellison, O. H.	Strome	783	Sept. 18, 1908
Endersby, John Geo.	Lethbridge	10	Sept. 16, 1905
Elford, Albert	Grassy Lake	1009	Apr. 25, 1909
Edwards, Orien	Cheadle	1020	Apr. 28, 1909
Emmericks, John J.	Gleichen	1861	June 20, 1911
Evans, John B.	Canmore	1022	Apr. 28, 1909
East, Neal	Edmonton	1083	July 9, 1909
Elder, Chas. G.	Calgary	1118	Sept. 21, 1909
Entwistle, Chas. H.	Edmonton	1145	Sept. 24, 1909
Elliott, Thos.	Cardiff	1182	Nov. 24, 1909
Emrich, Wm.	Innisfail	1198	Mar. 4, 1910
Enzenauer, Peter	Loma	1263	Mar. 24, 1910
Earl, Edgar G.	Norton	1392	Apr. 25, 1910
Egger, Christian	Bowville	1411	May 21, 1910
Ellis, Fredk. B.	Coleman	1422	June 11, 1910
Erickson, Eric A.	Milk River	1423	June 11, 1910
Enyeart, Chas. F.	New Dayton	1566	Oct. 20, 1910
Evans, Geo. W.	Magrath	1314	Apr. 7, 1910
Emde, Wm. J.	Coaldale	1614	Mar. 7, 1911
Eld, Gust	Parkland	1651	Mar. 20, 1911
Eshpeter, Hy.	Spring Lake	1714	Apr. 5, 1911
Ensign, Elmer G.	Barnwell	1780	Apr. 24, 1911
Edwards, Jas. M.	Calgary	1820	May 20, 1911
Evanson, Ed. M.	Raymond	1876	July 13, 1911
Earl, Alex.	Strathcona	1891	Aug. 16, 1911
Evans, Earl L.	Leslieville	1928	Sept. 7, 1911
Evans, Thos. O.	Lille	1999	Nov. 17, 1911
Elklor, James J.	Calgary	2036	Feb. 14, 1912
Edmonds, Charles	Strathcona	2099	Mar. 25, 1912
Elynik, Fred.	Mundare	2194	Apr. 24, 1912
Engen, Ole K.	Suffield	2301	June 11, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Evans, Alfred	Edmonton	2312	June 17, 1912
Eades, John J.	Vermillion	2393	Oct. 10, 1912
Flack, Samuel	Red Deer	*211	Dec. 10, 1912
Findlay, Jas. F.	Leduc	*194	Dec. 18, 1901
Fair, Francis Wm.	Medicine Hat	*257	Aug. 18, 1902
Foster, Wm. W.	Red Deer	*370	May 13, 1903
Fluker, W. R.	Fort Saskatchewan	*545	Apr. 18, 1904
Flett, Andrew R.	Calgary	*744	Mar. 16, 1905
Farren, Edgar	Evarts	*777	Mar. 24, 1905
Fowler, Wm. H.	Edmonton	*800	Mar. 31, 1905
Flintoff, Walter	Partridge Hill	*816	Apr. 14, 1905
Ferguson, Ernest G.	Fort Saskatchewan	944	Apr. 5, 1909
Fairman, Chas.	Medicine Hat	85	Apr. 11, 1906
Frizzelle, Jas. I.	Lacombe	104	Apr. 24, 1906
Fullerton, Thos. W.	Calgary	122	Apr. 30, 1906
Fordyce, J.	Bowden	156	May 31, 1906
Faltainsley, M.	Morinville	208	Sept. 13, 1906
Fitzsimmons, G. E.	Calgary	237	Sept. 24, 1906
Falkenberg, Fred D.	Saron	275	May 15, 1907
Forster, Michael	Leduc	278	May 15, 1907
Fortune, Geo.	Trochu Valley	301	May 23, 1907
Fryett, Arthur J.	Neapolis	312	May 29, 1907
Frieson, J. F.	Sunny Slope	313	May 29, 1907
Fike, Daniel K.	Crossfield	320	May 29, 1907
Fuller, Albert	Calgary	357	June 4, 1907
Fox, Henry	Olds	380	June 10, 1907
Findley, Thos.	High River	429	June 19, 1907
Fricke, Chas. L.	Erskine	541	Oct. 28, 1907
Fauver, A. E.	Lamerton	542	Oct. 28, 1907
Freeze, Benj. H.	Edmonton	590	Apr. 2, 1908
Fried, Vincent J.	Granum	598	Apr. 2, 1908
		1643	Mar. 15, 1911
Firth, Hedrick	Lethbridge	603	Apr. 8, 1903
Fowler, Dan T.	Magrath	614	Apr. 8, 1903
Friesen, Peter	Didsbury	652	Apr. 15, 1908
Fenner, John S.	Camrose	718	May 18, 1908
Farquhar, Alex. W.	Calgary	802	Sept. 22, 1908
Fortin, Chas. C.	Morinville	876	Jan. 18, 1909
Forland, Ole	Lethbridge	900	Mar. 24, 1909
Feargue, Francis J.	Pincher Creek	930	Apr. 1, 1909
Forrest, Jas. O.	Lacombe	951	Apr. 5, 1909
Fowlie, Wm.	Blayney	967	Apr. 16, 1909
Forslin, John	New Dayton	989	Apr. 20, 1909
Falardean, Aaron J.	Taber	1010	Apr. 25, 1909
Francis, Jos.	Taber	1011	Apr. 25, 1909
		1717	Apr. 5, 1911
Fullerton, Daniel W.	Taber	1012	Apr. 25, 1909
Fielcing, Jas.	Lethbridge	1434	June 25, 1910
Farrend, Chas. H.	Barnwell	1152	Sept. 28, 1909
Finstad, Ole A.	Clareholm	1153	Sept. 28, 1909
Fansher, Fred	Lamont	1159	Sept. 29, 1909
Fedun, John	Mundare	1160	Sept. 29, 1909
Frey, Frank	Frank	1172	Oct. 11, 1909
Fairbairn, Robt.	Vegreville	1174	Oct. 22, 1909
Fietz, Otto	Diamond City	1222	Mar. 15, 1910
Fisher, Bert	Coleman	1250	Mar. 21, 1910
Fowler, Willis L.	High River	1261	Mar. 22, 1910
Frank, Christopher E.	Frankburg	1264	Mar. 24, 1910
Fedoruk, Tyofi	Vegreville	1305	Apr. 6, 1910

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Fenton, S. A.	Taber	1370	Apr. 15, 1910
Fletcher, John R.	Grassy Lake	1378	Apr. 19, 1910
Francis, Wm.	Carlstadt	1393	Apr. 25, 1910
Frigon, Fred	Calgary	1447	July 15, 1910
Fike, Jesse J.	Barnwell	1511	Sept. 21, 1910
Forey, John Jos.	Big Valley	1514	Sept. 21, 1910
Forster, Jas.	Hillcrest	1627	Mar. 11, 1911
Firth, Wilfred	Macleod	1637	Mar. 15, 1911
Farrell, Percy E.	Carstairs	1652	Mar. 20, 1911
Ferguson, Dugald	Nanton	1734	Apr. 10, 1911
Frizzelle, Jinkle, G.	Calgary	1735	Apr. 10, 1911
Freisen, Ger. H.	Sunny Slope	1715	Apr. 5, 1911
Ferschweiler, Jno.	Trochu	1716	Apr. 5, 1911
Flynn, Chas.	Calgary	1736	Apr. 11, 1911
Fleming, Jas.	Medicine Hat	1781	Apr. 24, 1911
Forsyth, Jas. A.	Red Deer	1798	Apr. 26, 1911
Fleming, Andrew B.	Irricana	1805	May 6, 1911
Frache, Richard	Lethbridge	1862	June 20, 1911
Foster, Arthur C.	Calgary	1898	Aug. 22, 1911
Foughty, Clifford R.	Carlstadt	1933	Sept. 8, 1911
Forbes, John	Edmonton	2008	Dec. 12, 1911
Freeman, Herbert B.	Edmonton	2009	Dec. 12, 1911
Flamme, August W.	Bow Island	2058	Mar. 13, 1912
Fitzpatrick, John	Bellevue	2073	Mar. 18, 1912
Farmer, Raymond W.	Morningside	2138	Apr. 10, 1912
Fletcher, James	Metiskow	2165	Apr. 20, 1912
Freeland, Charles	Hindville	2231	Apr. 29, 1912
Fenwick, Charles	Strome	2297	June 10, 1912
Fairhurst, George	Coleman	2305	June 14, 1912
Farnsworth, Joseph	Seven Persons	2351	July 19, 1912
Findlay, Alex.	N. Edmonton	2383	Sept. 27, 1912
Gagnon, Alfred	St. Albert	*55	May 28, 1900
Gaetz, Jas. F.	Red Deer	*226	Apr. 23, 1902
George, John	Kamloops	*478	June 13, 1904
Giddings, Thos.	Calgary	*489	Mar. 14, 1904
Grigat, John	Leduc	*533	Apr. 18, 1904
Gobel, H. C.	Edmonton	*543	Apr. 18, 1904
Gardner, Marques	Red Deer	*780	Mar. 24, 1905
Green, Jno.	Medicine Hat	2285	May 25, 1912
Gallup, Walter E.	Medicine Hat	*858	June 14, 1905
Grote, Frank	Bon Accord	*890	Aug. 31, 1905
Griffen, Henry	Stavely	11	Sept. 16, 1905
Grote, Alex. E.	Spruce Grove	65	Mar. 16, 1906
Gibeault, J. Eugene	Morinville	70	Mar. 16, 1906
Graf, John	Fort Saskatchewan	92	Apr. 11, 1906
Garneau, Larry	Strathcona	224	Sept. 13, 1906
Godley, Maurice W.	Red Deer	238	Sept. 27, 1906
Grant, Farquhar	Edmonton	267	Apr. 29, 1907
Glaspie, Ed. H.	Hurry	331	May 31, 1907
Grue, Simon T.	Camrose	394	June 14, 1907
Grove, Benj. K.	Camrose	404	June 14, 1907
Grant, Geo. F.	Lewisville	412	June 14, 1907
Galentine, Frank	High River	434	June 19, 1907
Graves, Jas. H.	Calgary	1223	Mar. 15, 1910
Giese, Gottlieb W.	Spruce Grove	499	Oct. 15, 1907
Graham, Willard	Crossfield	519	Oct. 24, 1907
Gwillt, Geo.	Didsbury	528	Oct. 24, 1907
Gray, John A.	Claresholm	576	Mar. 23, 1908
Gibson, Wm. H.	Coleman	601	Apr. 8, 1908

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—Continued.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Gerrard, John	Lundbreck	2074	Mar. 18, 1912
Girber, Dan. E.	Sunny Slope	648	Apr. 4, 1908
Gillett, Geo. I.	Carstairs	681	May 1, 1908
Grundy, Jas.	Bowden	684	May 1, 1908
Greene, Geo. A.	Edmonton	708	May 18, 1908
Gustafson, Ivan	Leduc	1375	Apr. 19, 1910
Gibbs, Jas. A.	Deinorte	715	May 18, 1908
Gray, Wm. J.	Fort Vermilion	739	Aug. 6, 1908
George Wm. S.	Peace River Crossing..	740	Aug. 6, 1908
Graham, Jno. M.	Athabasca Landing ...	746	Aug. 13, 1908
Gotobed, B.	Strathcona	776	Sept. 18, 1908
Gale, Sydney H.	Calgary	791	Sept. 24, 1908
Gillies, Wm.	Strathcona	872	Dec. 23, 1908
Goodfellow, Jas.	Calgary	118	Apr. 30, 1906
Goeson, Geo. J.	Granum	912	Mar. 30, 1909
Gilmore, David	Frank	913	Mar. 30, 1909
Gibb, David T.	Raymond	990	Apr. 20, 1909
Gusa, Ernest E.	Calgary	1013	Apr. 25, 1909
Grobe, Chas. W.	Shepard	1023	Apr. 28, 1909
Geertruyden, H. Van	Edmonton	1086	July 25, 1909
Gilmore, Chas. R.	Red Willow	1091	Aug. 27, 1909
Gullekson, Edwin L.	Wetaskiwin	1195	Sept. 7, 1909
Guertin, Jos. E.	Bowville	1101	Sept. 15, 1909
Gowdy, Wm. T.	Airdrie	1119	Sept. 21, 1909
Green, Jay H.	Brant	1120	Sept. 21, 1909
Grimoldby, Walter H.	Strathcona	1161	Sept. 29, 1909
Gobell, Edward	Royal View	2266	May 18, 1912
Grigat, John Jr.	Leduc	1286	Apr. 1, 1910
Gunderson, Ingval J.	Warner	1360	Apr. 14, 1910
Gruidl, Stephen	Manfred	1404	May 17, 1910
Goodwin, Wm.	Strathcona	1448	July 15, 1910
Gerrie, Geo.	Oxville	1496	Sept. 16, 1910
Gibbons, Geo. A. R.	Battensburg	1497	Sept. 16, 1910
Giese, Daniel	Spruce Grove	1498	Sept. 16, 1910
Guess, Herbert	Pincher Creek	1567	Oct. 20, 1910
Gosling, Fredk.	Morley	1580	Nov. 14, 1910
Gilmer, Allan	Provost	1673	Mar. 24, 1911
Gerchke, Wm.	Walsh	1752	Apr. 15, 1911
Green, Chas. L.	Calgary	1764	Apr. 19, 1911
Gross, Hy. A.	Burdette	1702	Mar. 31, 1911
Graham, Oscar J.	Grassy Lake	1703	Mar. 31, 1911
Gardner, Fred W.	Dalroy	1737	Apr. 10, 1911
Gray, Jesse L.	Macleod	1782	Apr. 24, 1911
Gunderson, Cornelius	Warner	1827	May 26, 1911
Graham, Wm. Robt.	Summerview	1828	May 26, 1911
Gray, Wallace C.	Edmonton	1844	June 9, 1911
Greenwood, Joseph	Calgary	1850	June 13, 1911
Green, Jno. Hy.	Staunton	1877	July 13, 1911
Greenwood, John	Calgary	1899	Aug. 22, 1911
Graham, Wm. A.	Coaldale	1908	Aug. 24, 1911
Gray, Irving	Yetwood	1909	Aug. 24, 1911
Gray, Elgin W.	Entwistle	2330	July 16, 1912
Gaugner, Arthur O.	Lethbridge	1977	Oct. 24, 1911
Gray, Luke Chas.	Calgary	2367	Sept. 10, 1912
Gellhorn, Wilhelm	Strathcona	1594	Dec. 10, 1910
Gellhorn, Wilhelm	Strathcona	2425	Dec. 13, 1912
Gloer, Harrison	Iron Springs	2059	Mar. 13, 1912
Goetz, Emil Jos.	Evergreen	2075	Mar. 18, 1912
Graf, John Peter	Independence	2100	Mar. 25, 1912
Ganser, Moritz A.	Provost	2139	Apr. 18, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Greenwood, Geo. F.	Warner	2150	Apr. 16, 1912
Grettum, Clarence	Bawlf	2166	Apr. 20, 1912
Grant, William, Jr.	Killam	2167	Apr. 20, 1912
Gair, David	Strome	2168	Apr. 20, 1912
Griggs, Ralph	Suffield	2171	Apr. 23, 1912
Gardner, Harold M.	Medicine Hat	2178	Apr. 23, 1912
Gaskell, Edwin	Edmonton	2201	Apr. 25, 1912
Grainger, Albert	Wainwright	2215	Apr. 29, 1912
Gilkinson, Robt. J.	Clover Bar	2223	Apr. 29, 1912
Goldsmith, Oliver	Ethelwyne	2224	Apr. 29, 1912
Gleason, Nathan S.	Red Deer	2253	May 3, 1912
Goodwin, Edwin C.	Bassano	2275	May 22, 1912
Graham, John	Edmonton	2288	May 29, 1912
Grimoldsby, John D.	Strathcona	2313	June 17, 1912
Griffith, Lewis O.	Calgary	2341	July 18, 1912
Galonot, Ernest L.	Cowley	2352	July 19, 1912
Gueker, Stephen M.	Big Valley	2409	Oct. 23, 1912
Glennon, Joshua	Banff	2421	Dec. 4, 1912
Hewer, Jesse J.	Strathcona	*24	Oct. 9, 1899
Harrold, David	Edmonton	*54	May 28, 1900
Heffner, Frank	Bruederhelm	*92	Nov. 15, 1900
Holden, J. A.	Strathcona	*114	Dec. 31, 1900
Hober, Jno. W.	Ponoka	*214	Jan. 7, 1902
Harris, Ed. S.	Star	*327	Dec. 18, 1902
Hudson, Arthur C.	Edmonton	*330	Jan. 6, 1903
Hehlsdoerfer, Jos.	Edmonton	*359	May 13, 1903
Haney, Sylvester	Lacombe	*482	Jan. 28, 1904
Houghstol, Anton	Wetaskiwin	*516	Apr. 18, 1904
Harrold, Jno. Jr.	Edmonton	*534	Apr. 18, 1904
Hankehadl, Edgar O.	Duhamel	*785	May 27, 1905
Hardy, Albert Wm.	Lake de May	878	Feb. 10, 1909
Henschel, August	Strathcona	49	Sept. 23, 1905
Hart, Wm. J.	Raymond	22	Sept. 16, 1905
Hacking, Geo. A.	Magrath	23	Sept. 16, 1905
Haybarger, Chas. A.	Fort Saskatchewan	34	Sept. 16, 1905
Hewitt, Robt. E.	Bon Accord	38	Sept. 18, 1905
Hays, Morion L.	Tofield	91	Apr. 11, 1906
Headley, Henderson	Medicine Hat	88	Apr. 11, 1906
Higgins, Jas. A.	Medicine Hat	87	Apr. 11, 1906
Humbke, Detriche E.	Battle River	101	Apr. 20, 1906
Hunter, Wm. Jno.	Fort Saskatchewan	109	Apr. 24, 1906
Hobson, Patrick J.	Strathcona	130	May 4, 1906
Hunter, Fred H.	Didsbury	151	May 31, 1906
Hallett, Geo. E.	Camrose	163	July 7, 1906
Henry, Ortus	Claresholm	177	Aug. 13, 1906
Heighington, J. H.	Rosenroll	1321	Apr. 7, 1910
Hammitt, J. A.	Wetaskiwin	234	Sept. 20, 1906
Harris, A. J.	Chipman	223	Sept. 13, 1906
Hardy, Wm. B.	Edmonton	270	Apr. 29, 1907
Hellmers, Jno.	Millet	276	May 15, 1907
Hitchcock, Arthur L.	Pine Lake	292	May 20, 1907
Harris, Ed.	Mayton	303	May 23, 1907
Hardman, Geo. S.	Mayton	306	May 23, 1907
Hilts, Neil A.	Didsbury	314	May 29, 1907
Huff, Wm. H.	Crossfield	315	May 29, 1907
Harrison, David R.	Lamont	333	May 31, 1907
Handley, J. T.	Valley City	370	June 7, 1907
Hauser, John R.	Strome	387	June 14, 1907
Hauser, Geo. W.	Strome	401	June 14, 1907

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Halstead, Arthur L.	Edberg	407	June 14, 1907
Hoar, Wm. J.	Berry Bank	409	June 14, 1907
Hartt, Guy C.	High River	421	June 19, 1907
Herron, John A.	Nanton	915	May 30, 1909
Honan, John E.	High River	431	June 19, 1907
Hislop, Thos. L.	Taber	443	June 15, 1907
Havervold, Robt. L.	Lethbridge	462	July 15, 1907
Henderson, Clifton C.	Elinor	470	July 15, 1907
Heitman, Herman	Pincher Creek	473	July 15, 1907
Hicks, Ephraim B.	Raymond	474	July 15, 1907
Harding, Norris H.	Lethbridge	848	Oct. 6, 1908
Hallman, Sydney E.	Carstairs	488	Oct. 12, 1907
Horne, Ned.	Edmonton	506	Oct. 15, 1907
Healey, Jos.	Bankhead	548	Dec. 5, 1907
Henderson, John H.	Taber	554	Dec. 26, 1907
Harris, Geo. A.	Calgary	555	Jan. 20, 1908
Horwood, Walter E.	Calgary	560	Jan. 20, 1908
Hyde, Geo. T.	High River	581	Mar. 23, 1908
Hutchings, Percy J.	Edmonton	595	Apr. 2, 1908
Howard, Sam	Frank	2076	Mar. 18, 1912
Hills, Wm. C.	Hillcrest	624	Apr. 9, 1908
Hilts, Simon, W.	Didsbury	654	Apr. 15, 1908
Hoy, Walter M.	Medicine Hat	665	Apr. 27, 1908
Haskins, Martin	Vermillion	670	Apr. 27, 1908
Hayes, Fred J.	Vermillion	677	April 27, 1908
Hall, Richard	Lloydminster	673	Apr. 27, 1908
Higginson, R. R.	Kitscoty	671	Apr. 27, 1908
Holgate, Jno.	Airdrie	685	May 1, 1908
Haselwood, Alfred W.	Rosenroll	701	May 7, 1908
Hunting, Humphrey W.	Lacombe	769	Sept. 14, 1908
Holbrook, Peter E.	Stettler	770	Sept. 14, 1908
Hanlan, W. J.	Edmonton	777	Sept. 18, 1908
Hallvarson, Peter W.	Black Diamond	792	Sept. 22, 1908
Haeplin, Mark E.	Exshaw	793	Sept. 22, 1908
Henderson, Alex.	Granum	830	Oct. 2, 1908
Hendrickson, Jno.	Claresholm	831	Oct. 2, 1908
Henderson, Robt.	Lethbridge	958	Apr. 9, 1909
Hatfield, Chas. L.	Blayney	968	Apr. 16, 1909
Hansen, Peter C.	Cleversville	977	Apr. 20, 1909
Hultgren, Victor	Stavely	987	Apr. 20, 1909
Horne, Geo., Jr.	Edmonton	982	Apr. 20, 1909
Hall, David N.	Grassy Lake	993	Apr. 30, 1909
Honeywell, Sid. C.	Sedgewick	997	Apr. 22, 1909
Hough, Oscar	Camrose	998	Apr. 22, 1909
Haugen, Peter M.	Bardo	999	Apr. 22, 1909
Hardy, Herbt. J.	Exshaw	1024	Apr. 28, 1909
Henderson, A. J.	Langdon	1025	Apr. 28, 1909
Hauptert, John	Lewisville	1044	Apr. 30, 1909
Hunter, Jas. S.	Edmonton	1064	May 21, 1909
Hendrie, Jas. M.	Lethbridge	1102	Sept. 15, 1909
Hermann, Chas.	Queenstown	1121	Sept. 21, 1909
Hutchinson, Fred.	High River	1122	Sept. 21, 1909
Herrick, Oscar F.	Eyremore	1123	Sept. 21, 1909
Hiney, Allan	Cochrane	1124	Sept. 21, 1909
Hatfield, Wilmer B.	Lethbridge	1178	Nov. 13, 1909
Hawkes, Wm.	Edmonton	1185	Dec. 4, 1909
Heighs, Geo., Jr.	Iron Springs	1225	Mar. 15, 1910
Hewitt, Jas. R.	Cowley	1251	Mar. 21, 1910
Homer, Samuel C.	Claresholm	1275	Mar. 29, 1910
Hazelwood, Ernest Wm.	Bittern Lake	1287	Apr. 1, 1910

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Hauser, Anthony B.	Strome	1288	Apr. 1, 1910
Hicks, Frank I.	Raymond	1315	Apr. 7, 1910
Harris, Thos. Wm.	Raymond	1316	Apr. 7, 1910
Hislop, Wilber	Calgary	1320	Apr. 7, 1910
Hendrickson, Edwin	Crossfield	1335	Apr. 11, 1910
Hickox, Wm. C.	Cochrane	1336	Apr. 11, 1910
Holte, Ole	Logan	1347	Apr. 13, 1910
Hansen, Fred	Viking	1348	Apr. 13, 1910
Hammer, Leo	Lethbridge	1358	Apr. 14, 1910
Hipp, Wm.	Taber	1371	Apr. 15, 1910
Herrick, Weston M.	Cleeverville	1387	Apr. 22, 1910
Harder, Andrew J.	Medicine Hat	1412	May 21, 1910
Harrold, John	Lethbridge	1394	Apr. 25, 1910
Hamilton, Walter	Olds	1419	June 9, 1910
Hamilton, John	Pincher Creek	1424	June 11, 1910
Hughes, Robt. Samuel	Cardiff	1443	July 14, 1910
Hall, Jesse D.	Stirling	1466	Aug. 30, 1910
Horn, Peter	Lethbridge	1467	Aug. 30, 1910
Horn, Wm.	Lethbridge	1478	Sept. 1, 1910
Hansen, Arney	Millet	1602	Jan. 20, 1911
Hill, Geo. S.	Edmonton	1499	Sept. 16, 1910
Harwood, Thos. R.	Stettler	1515	Sept. 21, 1910
Hohle, John F.	Calgary	1523	Sept. 23, 1910
Heaton, Frank	Edmonton	1528	Nov. 15, 1910
Holte, M. D.	Kipp	1615	Mar. 7, 1911
Heyland, Wm. N.	Claresholm	1644	Mar. 16, 1911
Hough, Floyd G.	Calgary	1653	Mar. 20, 1911
Halloran, Fred P.	Strathcona	1665	Mar. 22, 1911
Harding, Thos. H.	Edmonton	1666	Mar. 22, 1911
Hallett, John	Castor	1674	Mar. 24, 1911
Hanna, Robt. J.	Stirling	1680	Mar. 28, 1911
Howorth, Chas.	Calgary	1753	Apr. 15, 1911
Hagen, Henry	Battle Lake	1765	Apr. 19, 1911
Heisler, Jacob	Spring Lake	1718	Apr. 5, 1911
Hennessey, Robt. G.	Bassano	1719	Apr. 5, 1911
Horton, Frank S.	Medicine Hat	1748	Apr. 10, 1911
Harrison, Harley	Lethbridge	1783	Apr. 24, 1911
Holmberg, Jno. A.	Lucky Lake	1784	Apr. 24, 1911
Harrington, Dan. L.	Diamond City	1829	May 26, 1911
Horton, S. B.	Barons	1830	May 26, 1911
Hardy, Robt. W.	Leduc	1846	June 9, 1911
Honnor, Herbert N.	Medicine Hat	1863	June 20, 1911
Huff, W. P.	Edmonton	1880	July 15, 1911
Haine, Sanford	Edmonton	1881	July 18, 1911
Harwood, Walter	Castor	1892	Aug. 16, 1911
Hornberger, Raymond	Reid Hill	1910	Aug. 24, 1911
Hango, John J.	Red Deer	1929	Sept. 27, 1911
Henry, Wm. G.	Calgary	1934	Sept. 8, 1911
Hunerkoch, Geo. W.	Magrath	1941	Sept. 8, 1911
Harris, John	Fishburn	1942	Sept. 9, 1911
Hossier, Chas. A.	Halkirk	1961	Oct. 18, 1911
Heighington, Frank H.	Bittern Lake	1962	Oct. 18, 1911
Houghton, Ernest	Calgary	1970	Oct. 20, 1911
Hatherell, Albert	Suffield	1979	Oct. 24, 1911
Hanson, William	Spring Lake	1989	Nov. 11, 1911
Holmes, George E.	Gleichen	1993	Nov. 16, 1911
Holland, Milton C.	Noble	2016	Dec. 19, 1911
Harman, Frank E.	Pincher Stn.	1978	Oct. 24, 1911
Harman, Frank E.	Pincher Stn.	2432	Dec. 17, 1912
Hinkle, John F.	Carlstadt	2026	Jan. 16, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Holmberg, Robt. E.	Calgary	2037	Feb. 14, 1912
Halverson, John A.	Edgerton	2101	Mar. 25, 1912
Halvorson, Arent. C.	Metiskow	2140	Apr. 10, 1912
Halvorson, Henry G.	Metiskow	2141	Apr. 10, 1912
Halvorson, Elmer J.	Metiskow		10, 1912
Holt, Olaf A.	Winnifred	2179	Apr. 23, 1912
Holmgren, Walter	Edmonton	2196	Apr. 24, 1912
Holmgren, Walter	Edmonton	2331	July 16, 1912
Hedlund, Victor	Wainwright	2197	Apr. 24, 1912
Hoskins, James	Viking	2198	Apr. 24, 1912
Haines, Charles M. J.	Calgary	2205	Apr. 26, 1912
Hunter, Robert	Canmore	2206	Apr. 26, 1912
Hertel, Christian	Calgary	2207	Apr. 26, 1912
Hertel, Christian	Calgary	2437	Dec. 18, 1912
Howard, Henry	Wainwright	2216	Apr. 29, 1912
Hawryschuk, George	Mundare	2220	Apr. 29, 1912
Harding, Montague C.	Manville	2230	Apr. 29, 1912
Howes, Fred R.	Stauffer	2254	May 3, 1912
Heinze, William Ed.	Coperville	2255	May 3, 1912
Haney, Edward	Bassano	2276	May 22, 1912
Hickman, Edward H.	Gleichen	2277	May 22, 1912
Hanna, Melvin	Edmonton	2314	June 17, 1912
Hindman, James	Medicine Hat	2353	July 19, 1912
Halsall, Joseph	Stavely	2368	Sept. 17, 1912
Hardy, Thomas	Lethbridge	2369	Sept. 17, 1912
Hathaway, Harold	Edmonton	2394	Oct. 10, 1912
Hudson, Benj. R.	Cardston	2398	Oct. 17, 1912
Hesse, William	Calgary	2438	Dec. 18, 1912
Harman, Noah S. A.	Edmonton	2426	Dec. 13, 1912
Hildebrandt, Oscar	Strathcona	2427	Dec. 13, 1912
Imeson, Geo.	Stony Plain	*206	Dec. 18, 1901
Ibson, Clause W.	Mewassin	*804	Mar. 31, 1905
Isaacson, Frank	Claresholm	191	Apr. 13, 1906
Iverson, Olaf	Molstad	231	Sept. 20, 1906
Isaacson, Arthur F.	Evarts	514	Oct. 22, 1907
Isherwood, Wm.	Calgary	588	Mar. 23, 1908
Ingram, Wm.	Leduc	860	Oct. 7, 1908
Isaacson, Willie	Claresholm	969	Apr. 16, 1909
Illingworth, Jos.	Edmonton	983	Apr. 20, 1909
Inglesby, E. C.	Edmonton	1180	Nov. 16, 1909
Imler, Jno. C.	Okotoks	1326	Apr. 8, 1910
Ireland, James H.	Blairmore	1629	Mar. 11, 1911
Ingram, Wesley	Tofield	1697	Mar. 31, 1911
Ives, Albert J.	Grassy Lake	1704	Mar. 31, 1911
Ireland, Wm. Jas.	Cardston	1911	Aug. 24, 1911
Innes, James L.	Edmonton	2315	June 17, 1912
Iball, William	Kipp	2354	July 19, 1912
Jackson, Chas.	Calgary	*66	July 19, 1900
Joyner, Chas. A.	Bentley	*173	Oct. 2, 1901
James, Dunham D.	Didsbury	*321	Nov. 1, 1902
Jeune, Ivan	Wetaskiwin	*332	Feb. 13, 1903
Jamieson, Johnston	Ponoka	*353	Apr. 24, 1903
Johnson, Conrid	Red Deer	*414	Aug. 29, 1903
Jameson, Chas. W.	Ponoka	*644	Oct. 15, 1903
James, F. S.	Ponoka	28	Sept. 16, 1905
Johnson, Elijah	Canyon	61	Dec. 29, 1905
Johnson, Ed.	Diana	99	Apr. 20, 1906
Jenson, Louis C.	Alix	114	Apr. 25, 1906

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Jones, Jack.	Bankhead	140	May 14, 1906
Johnson, Benj. F.	Raymond	186	Aug. 13, 1906
Jones, Fred.	Coleman	189	Aug. 13, 1906
Job, Chas.	Strathcona	222	Sept. 13, 1906
Jordon, A. H.	Edmonton	271	Apr. 22, 1907
Jesse, Ed.	Hardisty	316	May 29, 1907
Johnson, G. Anton	Didsbury	328	May 31, 1907
Johanson, Henry	Walsh	361	June 4, 1907
Johnson, Jos.	Medicine Hat	284	May 15, 1907
Jones, Arthur	Camrose	383	June 14, 1907
Johns, Thos. L.	Magrath	459	July 15, 1907
Jamieson, Jesse H.	Edmonton	505	Oct. 15, 1907
Johannson, Jno. T.	Olds	521	Oct. 24, 1907
Journey, Clyde R.	Brant	582	Mar. 22, 1908
Jepson, Walter	Bellevue	612	Apr. 8, 1908
Johnston, Percy W.	Edmonton	713	May 18, 1908
Johnson, Elmer	Daysland	716	May 18, 1908
Julien, Eugene	South Bend	720	May 18, 1908
Johnson, Chas. J.	Stavely	832	Oct. 2, 1908
Jenson, Ole E.	Seven Persons	833	Oct. 2, 1908
Jones, Isaac	Raymond	849	Oct. 6, 1908
James, John E.	Taber	850	Oct. 6, 1908
Johnson, Alfred	Hillcrest	917	Mar. 30, 1909
Jackson, Thos. C.	Stettler	962	Apr. 13, 1909
James, Griffith L.	Ponoka	975	Apr. 17, 1909
Jones, Robert	Lethbridge	1103	Sept. 15, 1909
Jermaine, Stephen	Andrew	1038	Apr. 29, 1909
Johnson, W. E.	Lethbridge	1058	May 4, 1909
Jones, Arthur W.	Edmonton	1060	May 20, 1909
Johnson, John G.	Millet	1065	May 21, 1909
Jones, Wm. Daniel	Edmonton	2289	May 29, 1912
Johnson, Chas. J.	Onoway	1192	Jan. 10, 1910
Jones, Wm. C.	Bow Island	1226	Mar. 25, 1910
Jeanclaude, Leopold	Edmonton	1306	Apr. 6, 1910
Jackson, Roy E.	Queenstown	1327	Apr. 8, 1910
Johnston, Albert J.	Calgary	2208	Apr. 26, 1912
Jordan, Glen L.	Banff	1338	Apr. 11, 1910
Jones, Albert E.	Rosebud Creek	1407	Apr. 19, 1910
Johnsrud, Alfred	Harmattan	1552	Oct. 17, 1910
Johnson, Jas. F., Jr.	Barnwell	1568	Oct. 20, 1910
Jones, Samuel	Lethbridge	1618	Mar. 7, 1911
James, Reginald	Coleman	1630	Mar. 11, 1911
Jensen, Rasmus	Raymond	1681	Mar. 28, 1911
Johnson, Wm. F.	Walsh	2021	Dec. 27, 1911
Jones, Wm. N.	Edmonton	1814	Apr. 18, 1911
Jenkins, Jas.	Coleman	1831	May 26, 1911
Jelly, Alf.	Calgary	1882	July 19, 1911
Johnson, Ellin	Calgary	1923	Aug. 26, 1911
Joseph, Orvil E.	Macleod	1935	Sept. 8, 1911
Jantzen, Peter H.	Calgary	1936	Sept. 8, 1911
Johnson, Benj. C.	Magrath	1943	Sept. 9, 1911
James, John	Elcan	1983	Oct. 24, 1911
Johnson, Josepn	Blackie	2038	Feb. 14, 1912
Johnson, William	Ft. Chipewayn	2045	Feb. 22, 1912
Jackline, Morley	Lethbridge	2060	Mar. 13, 1912
Jones, Ray	Calgary	2239	May 1, 1912
Jackson, Geo. Alex.	Lignite	2263	May 8, 1912
Jeffrey, Philip	Granum	2360	Aug. 14, 1912
Johannsen, Alfred	Calgary	2376	Sept. 19, 1912
Johnson, John Peter	Taber	2399	Oct. 17, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Krause, Otto	Innisfail	*171	Oct. 1, 1901
Kanngiesser, Simon	Lacombe	*521	Apr. 18, 1904
Kelsey, A. F.	Clover Bar	*535	Apr. 18, 1904
Knapp, Henry H.	Edmonton	*645	Oct. 15, 1904
Kerwin, James	Leavings	*748	Mar. 16, 1905
Kolner, Bernard	Millet	*793	Mar. 27, 1905
Klapstein, Ed.	Ellerslie	*49	Apr. 25, 1900
Krouse, Wilhelm	Spruce Grove	*819	Apr. 14, 1905
Kallis, Ed.	Strathcona	*847	May 26, 1905
Knight, Harry P.	Edmonton	35	Sept. 16, 1905
Krinke, August	Highland Park	46	Sept. 18, 1905
Kerr, John	Calgary	64	Mar. 9, 1906
Kennedy, Dent.	Calgary	124	Apr. 30, 1906
Karmagel, F. R.	Didsbury	154	May 31, 1906
Kiddle, Thos. M.	Stirling	165	Aug. 11, 1906
Kearney, W. J.	Claresholm	178	Aug. 13, 1906
Kjosness, Peter P.	Martins	217	Sept. 13, 1906
Kendrews, Jos. W.	Edwell	250	Oct. 5, 1906
Krinke, Benj.	Highland Park	249	Oct. 5, 1906
Knowles, Kenneth E.	Wetaskiwin	264	Apr. 25, 1907
Kremer, David H.	Innisfail	294	May 20, 1907
Kjorsvik, Albert	Eagle Hill	305	May 23, 1907
Kittlitz, Ed.	Bruederheim	329	May 31, 1907
Kenny, John	Calgary	918	Mar. 30, 1909
Knape, Ernest P.	Calgary	344	June 4, 1907
Keegan, Dan	Morley	355	June 4, 1907
Kreamer, Wm. W.	Strathcona	384	June 14, 1907
Keith, Scott	Taber	551	Dec. 26, 1907
Kniseley, Arthur C.	Standoff	1143	Sept. 21, 1909
Klein, Emil F.	Leduc	669	Apr. 27, 1908
Kadlec, Frank	Wetaskiwin	712	May 18, 1908
Kinne, Fred	Calgary	750	Aug. 28, 1908
Kemp, Robt. M.	Dwagh	816	Sept. 28, 1908
Keoster, Carl H.	Granum	834	Oct. 2, 1908
Keeler, Ralph A.	Lethbridge	851	Oct. 6, 1908
Kendrew, John T.	Edwell	888	Mar. 20, 1909
Kalis, Theodore	Edmonton	941	Apr. 2, 1909
King, Chas. F.	Macleod	953	Apr. 7, 1909
Knudson, Loues	Killam	1000	Apr. 22, 1909
Kundson, Chas. A.	Wetaskiwin	1098	Sept. 10, 1909
King, Benj.	Lethbridge	1227	Mar. 15, 1910
Keffer, J. John	Frank	2078	Mar. 18, 1912
Kitchen, Elroy R.	Cayley	1265	Mar. 24, 1910
Kittlitz, Chrystian	Bruederheim	1307	Apr. 6, 1910
Kneis, Louis	Stony Plain	1308	Apr. 6, 1910
Krutz, John	Calgary	1328	Apr. 8, 1910
Kincade, Jerry	Stirling	1372	Apr. 15, 1910
Klinger, Hy.	Calgary	1428	June 14, 1910
Kjosness, Alfred	Martins	1501	Sept. 21, 1910
Kuhl, Edwin	Stony Plain	1502	Sept. 21, 1910
Kinnen, Peter	Independence	1509	Sept. 21, 1910
Kruse, Herman	Hastings Coulee	1542	Oct. 7, 1910
Knight, O. L.	Taber	1586	Nov. 17, 1910
Kremper, Ernest	Edmonton	1589	Nov. 23, 1910
Kirkby, Theo.	Lethbridge	1619	Mar. 7, 1911
Kolschorofsky, Ed.	Stony Plain	1698	Mar. 31, 1911
Kirstein, Aug.	Wetaskiwin	1720	Apr. 5, 1911
Klaus, John S.	Gleichen	1739	Apr. 19, 1911
Kincade, Wyet E.	Seven Persons	1796	Apr. 24, 1911
Keller, Fred	Edmonton	2384	Sept. 27, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Kemp, George F.	Calgary	1851	June 13, 1911
Kiviatniowsky, Joe	Heatherwood	1853	June 16, 1911
Klassen, Abm. W.	Acme	1900	Aug. 22, 1911
Kaatz, Ed. A.	Burdett	1912	Aug. 24, 1911
Kelly, John D.	Calgary	1937	Sept. 8, 1911
Kuhl, Edward	Calgary	2375	Sept. 19, 1912
Kidd, George	Lethbridge	2029	Jan. 16, 1912
Kirkham, John T.	Macleod	2077	Mar. 18, 1912
Kerr, William	Coleman	2079	Mar. 18, 1912
Kilmer, Owen	Suffield	2130	Apr. 4, 1912
Knight, Herbert	Therion	2228	Apr. 29, 1912
Kinsella, Chas. A.	Strathcona	2316	June 17, 1912
Kerr, John	Calgary	2342	July 18, 1912
Lamoureux, Alcide	Lamoureux	96	Nov. 15, 1900
Lee, Geo.	Edmonton	*2442	Dec. 20, 1912
Lewis, Wm. H.	Innisfail	*888	Aug. 28, 1905
Lamoureux, Alp.	Lamoureux	*186	Dec. 18, 1902
Loiselle, Jerry	Red Deer	1599	June 4, 1911
Lundy, Wm. Thos.	Innisfail	*227	Apr. 23, 1902
Lynch, Alix. W.	Blairmore	*259	Aug. 18, 1902
Lyseng, Knut K.	Bittern Lake	*390	Aug. 7, 1903
Lindberg, Erick	Calmar	*510	Apr. 18, 1904
Langhausen, Jacob	Fort Saskatchewan	*523	Apr. 18, 1904
Langhausen, Peter	Fort Saskatchewan	*524	Apr. 18, 1904
Lee, Andrew E.	Wetaskiwin	*525	Apr. 18, 1904
Lehman, Harrison	Edmonton	*564	Feb. 15, 1908
Logan, John	Penhold	*774	Mar. 24, 1905
Logan, Dan	Red Deer	*783	Mar. 24, 1905
Lee, Oscar E.	Wetaskiwin	*788	Mar. 27, 1905
Long, Albert W.	Namoo	36	Sept. 16, 1905
Lindholm, Andrew G. J.	Burnt Lake	60	Dec. 27, 1905
Lee, Albert	Wetaskiwin	97	Apr. 20, 1906
Laine, Francois P.	Bankhead	138	May 14, 1906
Lambe, Alex	Didsbury	150	May 30, 1906
Linkous, Jas. B.	Raymond	173	Aug. 13, 1906
Lindsay, Samuel D.	Strathcona	212	Sept. 13, 1906
Lennox, Jas. A.	Red Deer	251	Oct. 5, 1906
Luigi, Liega	Lille	256	Dec. 28, 1906
Lawrence, Fred'k. S.	Fort Vermilion	544	Oct. 29, 1907
Lawrence, Fenwick N.	Edmonton	260	Feb. 23, 1907
Lavoil, Lewis J.	Evarts	290	May 20, 1907
Lancaster, Robt. V.	Calgary	736	July 24, 1908
Latam, Myron B.	Content	371	June 7, 1907
Lehman, Sam	Nanton	438	June 19, 1907
Lamoureux, Hermida	Lamoureux	502	Oct. 15, 1907
Lamoureux, Albert	Lamoureux	503	Oct. 15, 1907
Lee, Thos. H.	Olds	518	Oct. 24, 1907
Lewis, Lyman L.	Olds	526	Oct. 24, 1907
Lang, Wm.	Okotoks	566	May 26, 1908
Lyon, Omar	Blayney	571	May 23, 1908
Lee, John A.	Edmonton	592	Apr. 2, 1908
Lee, Lars	Leduc	678	Apr. 27, 1908
Loveless, Peter	Lloydminster	707	May 18, 1908
Lucas, Sam B.	Daysland	719	May 18, 1908
Lansing, Geo.	Leavings	1455	Aug. 2, 1910
Littlefield, Chas. W.	Eagle Hill	909	Mar. 26, 1909
Large, Eugene	Frank	919	Mar. 30, 1909
Lehman, Peter L.	Pincher Creek	931	Apr. 1, 1909
Laut, Frank	Ena	960	Apr. 9, 1909

*Indicates Certificate was granted by North-West Territories.

**SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—Continued.**

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Link, Ronald F.	Lethbridge	945	Apr. 6, 1909
Lunn, Edward	Stettler	963	Apr. 13, 1909
Lewis, Isaac H.	Killam	1001	Apr. 22, 1909
Long, Geo. S.	Namoo	1039	Apr. 29, 1909
Lunder, Andrew H.	Westerose	1045	Apr. 30, 1909
Leonard, Jas. F.	Seven Persons	1049	May 1, 1909
Larson, Edwin H.	Seven Persons	1050	May 1, 1909
Lindsey, Horace F.	Strathcona	1075	May 26, 1909
Larson, Harry	Langdon	1079	June 1, 1909
LaBonte, Fred	Calgary	1125	Sept. 21, 1909
Laventure, Arthur	Beaumont	1146	Sept. 25, 1909
Lawrence, Herman M.	Ross Creek	1162	Sept. 29, 1909
Long, Herbt. Wm.	Calgary	1187	Dec. 17, 1909
Lawrence, Sheridan	Fort Vermilion	741	Aug. 6, 1908
Laroux, Oliver	Chipewyan	742	Aug. 6, 1908
Lloyd, Roy A.	Carstairs	761	Sept. 11, 1908
Love, Thos.	Hicksburg	835	Oct. 2, 1908
Lindsay, Alvan A.	Calgary	1598	Jan. 6, 1911
Long, Henry G.	Calgary	1450	July 15, 1910
Lewis, Geo. H.	Calgary	1209	Mar. 7, 1910
Low, Ralph E.	Carmangay	1276	Mar. 29, 1910
Lloyd, John W.	Stavely	1277	Mar. 29, 1910
Lotan, Herbt. N.	Strome	1289	Apr. 1, 1910
Linquest, Nils W.	Rivierre Qui Barre ...	1309	Apr. 6, 1910
LeBranc, Roaul	Mayton	1332	Apr. 9, 1910
Lawrella, Michael	Bankhead	1339	Apr. 11, 1910
Lindman, W. L.	Milk River	1359	Apr. 14, 1910
Longacre, Fred	Taber	1373	Apr. 15, 1910
Levisque, Walter	Medicine Hat	1395	Apr. 25, 1910
Lunn, Arthur B.	Calgary	1401	Apr. 26, 1910
Long, Jas. W.	Calgary	1408	May 19, 1910
Lane, Lewis W.	Rowville	1425	June 11, 1910
Long, Fred	Belseker	1433	June 14, 1910
Lockhart, Wm.	Kipp	1479	Sept. 1, 1910
Lithgow, John	Reid Hill	1488	Sept. 6, 1910
Lorerm, John	Edmonton	1503	Sept. 9, 1910
Lighthall, Geo. B.	Bassano	1524	Sept. 23, 1910
Lambert, Arthur	Redcliff	1533	Sept. 24, 1910
LeGear, Russell C.	Wetaskiwin	1543	Oct. 7, 1910
Lindsay, Robt.	Lethbridge	1620	Mar. 7, 1911
Labby, Alfred	La Calmette	1770	Apr. 21, 1911
Lycan, Thos. S.	Bassano	1740	Apr. 10, 1911
Lysham, J. E.	Taber	1756	Apr. 15, 1911
Lambert, John A.	Taber	1785	Apr. 24, 1911
Lee, Ed. A.	Calgary	1809	May 8, 1911
Laughery, Jas. W.	Calgary	1821	May 20, 1911
Lister, Ossie	Lethbridge	1832	May 26, 1911
Lepard, Frank	Edmonton	1887	Aug. 11, 1911
Lake, Arch.	Calgary	1901	Aug. 22, 1911
Lee, John J.	Rosemead	1913	Aug. 24, 1911
Little, Wm. H.	Lethbridge	1944	Sept. 9, 1911
Lambert, Wm. E.	Diamond City	1980	Oct. 24, 1911
Lewis, Gilbert B.	Granum	1984	Oct. 24, 1911
Lefort, Henry	Taber	2013	Dec. 19, 1911
Levis, Everett E.	St. Albert	2024	Jan. 12, 1912
Lacquement, Eward C.	Yetwood	2031	Jan. 16, 1912
Lough, Marshall	Calgary	2039	Feb. 14, 1912
Lewis, Fred	Beaver Creek	2080	Mar. 18, 1912
Linton, William H.	Parkland	2092	Mar. 22, 1912
Lagasse, John L.	Edison	2102	Mar. 25, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Lippold, Herman	Cardston	2157	Apr. 19, 1912
Long, Charles W.	Medicine Hat	2180	Apr. 23, 1912
Lippert, Jacob	Irvine	2181	Apr. 23, 1912
Loritz, Frank	Strathcona	2218	Apr. 29, 1912
Levy, Ira M.	Albion Ridge	2246	May 2, 1912
Lohrman, Chris	Halkirk	2256	May 3, 1912
Lundh, Bernard	Claresholm	2306	June 14, 1912
Little, William Jno.	Strathcona	2335	Sept. 27, 1912
Lee, William O.	Youngstown	2411	Oct. 23, 1912
Lerbeckmo, Peter O.	Bardo	2428	Dec. 13, 1912
Morkin, Jno.	Dunbow	*39	Dec. 1, 1899
Martin, M. Z.	Morinville (suspended).	*56	May 28, 1900
Mitchell, Tim W.	Red Deer	*119	Feb. 7, 1901
Mather, E. M.	Calgary	*133	June 6, 1901
Morden, Jacob R.	Lacombe	*187	Dec. 18, 1901
Moore, John R.	Innisfail	*190	Dec. 18, 1901
Munier, Wilfred	Stony Plain	*199	Dec. 18, 1901
Miller, Philip	Morinville	*201	Dec. 18, 1901
Meneely, Wm.	Edmonton	*204	Dec. 18, 1901
Mikethus, Michael	Leduc	*210	Dec. 18, 1901
Morkeberg, D.	Innisfail	*232	Apr. 23, 1902
Martin, Henry E.	Wardner	*854	June 13, 1905
Mooney, W. S.	Lacombe	*513	Apr. 18, 1904
Murray, A. A.	St. Albert	*536	Apr. 18, 1904
Meunier, J. H.	Morinville	*537	Apr. 18, 1904
Meredith, Wilbert	Edmonton	*538	Apr. 18, 1904
Mathews, Geo.	Strathcona	*636	Oct. 15, 1904
Morgan, Oscar	Strathcona	*643	Oct. 15, 1904
Maxfield, W. H.	Namao	*646	Oct. 15, 1904
Mead, Francis A.	Pincher Creek	*678	Dec. 30, 1904
May, Daniel	Blairmore	*681	Jan. 21, 1905
Mew, John	Calgary	*750	Mar. 24, 1905
Muir, Wm. J.	Ponoka	1959	Sept. 23, 1911
Marler, Walter	Clover Bar	*799	Mar. 31, 1905
Mohr, John J.	Edmonton	*870	July 6, 1905
Morel, H. F.	Edmonton	37	Sept. 16, 1905
Melnik, Wm.	Star	40	Sept. 18, 1905
Mason, Jas. D.	Clover Bar	43	Sept. 18, 1905
Moss, Richard	Edmonton	*81	Mar. 26, 1905
Mahood, Robt. F.	Buford	94	Apr. 11, 1906
Murray, Dan L.	Bentley	105	Apr. 24, 1906
Mitchell, Jos. C.	Tees	111	Apr. 25, 1906
Moritz, Henry C.	Olds	146	May 31, 1906
Moritz, Louis, J. A.	Olds	148	May 31, 1906
Morkeberg, Holger	Markerville	157	May 31, 1906
Maxwell, Tim	Claresholm	180	Aug. 13, 1906
Murray, Thos. N.	Medicine Hat	171	Aug. 11, 1906
Muir, Geo. A.	Morrissey	877	Feb. 1, 1909
Maunchaw, Aug.	Strathcona	218	Sept. 13, 1906
Mead, Wm.	Edmonton	221	Sept. 13, 1906
Maxfield, Geo. A.	Namao	236	Sept. 13, 1906
Miller, Dick F.	Blackfalds	241	Sept. 27, 1906
Malcher, Chas.	Wetaskiwin	246	Oct. 5, 1906
Miller, Jones P.	Delnorte	334	May 31, 1907
Morrison, Avarid L.	Calgary	348	June 4, 1907
Martin, Jno. C. B.	Calgary	362	June 4, 1907
Moody, Jas. Wm.	Brocket	363	June 4, 1907
Morter, Chas. J.	Iowalta	365	June 7, 1907
Miller, Wm. M.	Brant	420	June 19, 1907

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Morrow, Jos. W.	Roundup	460	July 15, 1907
Meldrum, David (Jr.)	Raymond	466	July 15, 1907
Manning, Jas. A.	Cowley	471	July 16, 1907
Munro, Milo.	Gleichen	484	Aug. 28, 1907
Martin, Chas. A.	High River	487	Sept. 4, 1907
Miller, Fred C.	Cooking Lake	496	Oct. 15, 1907
Munro, Fred	Innisfail	510	Oct. 22, 1907
Morden, Jno.	Lacombe	925	Mar. 30, 1909
Malchow, G. E. A.	Earlville	538	Oct. 28, 1907
Mignault, Jos. C.	Calgary	579	Mar. 23, 1908
Middleton, Archie C.	Nanton	583	Mar. 23, 1908
Marshall, Frank P.	Spring Point	600	Apr. 8, 1908
May, Alex. S.	Lille	641	Apr. 14, 1908
Millar, T. B.	Burnt Lake	1631	Mar. 7, 1911
Marson, Chas. H.	Medicine Hat (dup.) ..	735	July 15, 1908
Mitchell, Franklin A.	Medicine Hat	664	Apr. 27, 1908
Miles, Jas.	Vermilion	667	Apr. 27, 1908
Mark, David McK.	Manville	1189	Dec. 29, 1909
Marler, Jas. T.	Crossfield	683	May 1, 1908
Martin, Landis	Stettler	686	May 1, 1908
Millar, Jno. F.	Bentley	694	May 6, 1908
Munro, Alex. A.	Lockhart	696	May 6, 1908
Morris, Wm. H.	Wetaskiwin	698	May 6, 1908
Maurice, Frank E.	Edmonton	730	May 26, 1908
Maxwell, Jno. W.	Cochrane	731	June 12, 1908
Morris, Jas. E.	Lochend	732	June 12, 1908
Morris, Jas. W.	Canmore	734	June 29, 1908
Morton, Lewis R.	Athabasca Landing	745	Aug. 6, 1908
Mott, Henry J.	Red Deer	752	Sept. 2, 1908
Murray, Jas.	Murray Valley	757	Sept. 8, 1908
Mortelette, H. C.	Edmonton	778	Sept. 18, 1908
Masse, Louis	Legal	778	Sept. 21, 1908
Mulligan, Geo. B.	Bon Accord	789	Sept. 21, 1908
Miller, Jacob	Stony Plain	790	Sept. 21, 1908
Marshall, Robt. E.	Raymond	852	Oct. 6, 1908
Murphy, Edward F.	Strathcona	875	Jan. 8, 1909
Morris, Andrew	Calgary	882	Mar. 19, 1909
Mackin, John	Lethbridge	902	Mar. 24, 1909
Mitchell, Ava D.	Aldersyde	935	Apr. 2, 1909
Munson, Jas. B.	Reid Hill	936	Apr. 2, 1909
Moore, Corey G.	Macleod	954	Apr. 7, 1909
Mudiman, David L.	Macleod	970	Apr. 16, 1909
Myers, James	Claresholm	955	Apr. 8, 1909
Myers, Roy C.	Claresholm	971	Apr. 16, 1909
Mulligan, Jos.	Canmore	1026	Apr. 28, 1909
Mundell, Wm. G. R.	Lethbridge	1054	May 3, 1909
Monson, Jos.	Camrose	1092	Sept. 7, 1909
Miller, Jas.	Diamond City	1104	Sept. 15, 1909
Marr, Robt.	Edmonton	1164	Sept. 29, 1909
Miller, Herman A.	Edmonton	1175	Oct. 27, 1909
Morris, John	Wild Horse	1177	Nov. 13, 1909
Muirhead, Jas. W.	Calgary	1210	Mar. 7, 1910
Mitchell, Wesley C.	Calgary	1211	Mar. 7, 1910
Morningstar, Roy	Lethbridge	1229	Mar. 15, 1910
Martin, Wm. A.	Lethbridge	1230	Mar. 15, 1910
Malchow, Fred C.	Claresholm	1278	Mar. 29, 1910
Mach, Jos.	Camrose	1291	Apr. 1, 1910
Messmer, Jno. F.	Hastings Coulee	1292	Apr. 1, 1910
Mildon, Wm. L.	Ponoka	1301	Apr. 5, 1910
Mueller, Mike M.	Warner	1361	Apr. 14, 1910

*Indicates Certificate was granted by North-West Territories.

**SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—Continued.**

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Mahood, C. J.	New Dayton	1362	Apr. 14, 1910
Mayberry, Thos. W.	Warner	1363	Apr. 14, 1910
Mitchell, Wm.	Calgary	1386	Apr. 21, 1910
Miles, John	Lethbridge	1388	Apr. 22, 1910
Merkel, Jacob F.	Irvine	1396	Apr. 25, 1910
Morley, Wm. N.	Morningside	1405	May 17, 1910
Mogridge, John Jas.	Copeville	1420	June 9, 1910
Molton, Earl	Calgary	1464	Aug. 29, 1910
Michaelis, Eddie	Milk River	1481	Sept. 1, 1910
Marshall, Wm. J.	Calgary	1525	Sept. 23, 1910
Malcolm, Roy	Calgary	1526	Sept. 23, 1910
Moses, Geo.	Medicine Hat	1534	Sept. 24, 1910
Muir, Geo. H.	Ponoka	1982	Oct. 24, 1911
Matson, Chas.	Calgary	1577	Oct. 20, 1910
Mudra, Chas.	Frank	2081	Mar. 18, 1912
Matheson, Murdoch R.	Granum	1645	Mar. 15, 1911
Musser, Angus	Bassano	1654	Mar. 20, 1911
Mansell, Wm.	Canmore	1741	Apr. 10, 1911
Moran, George I.	Langdon	1766	Apr. 19, 1911
Martin, Wm.	Sandstone	1767	Apr. 19, 1911
Martin, A. W.	Taber	1786	Apr. 24, 1911
Maker, Edgar L.	Seven Persons	1787	Apr. 24, 1911
Malton, John W.	Calgary	1806	May 6, 1911
Murrell, Vasco E.	Hardisty	1810	May 13, 1911
Melanson, Norman M.	Edmonton	1815	May 18, 1911
Mattison, Fred	Blairmore	1834	May 26, 1911
Murphy, Matthew	Granum	1835	May 26, 1911
Mayberry, J. R.	Red Deer	1855	June 17, 1911
Mah, Sam	Edmonton	1871	July 12, 1911
Miller, Wm. G.	Ryley	1893	Aug. 16, 1911
Merrit, Arza M.	Noble	1914	Aug. 24, 1911
Milligan, John L.	Burdett	1920	Aug. 25, 1911
Mickleeson, George A.	Calgary	2041	Feb. 14, 1912
Miniekler, John	Calgary	1925	Aug. 26, 1911
Morrison, Wm. V.	Red Deer	1930	Sept. 7, 1911
Miller, Edward S.	Spring Coulee	1945	Sept. 9, 1911
Meldrum, John C.	Lethbridge	1947	Sept. 9, 1911
Mullin, Jas.	Edmonton	1955	Sept. 9, 1911
Mildren, Wm. Geo.	Airdrie	1972	Oct. 20, 1911
Morgan, Jacob	Lethbridge	1981	Oct. 24, 1911
Melle, Ed. L.	Carlstadt	1994	Nov. 16, 1911
Melnik, Fred	Star	2049	Feb. 23, 1912
Murray, William B.	Magrath	2062	Mar. 13, 1912
Miller, Henry J.	Claresholm	2063	Mar. 13, 1912
Malchow, Max. E.	Stavely	2093	Mar. 22, 1912
Morris, Ernest	Gladys	2111	Mar. 28, 1912
Mikshus, John	Leduc	2115	Apr. 1, 1912
Marty, Robert Jr.	Carlstadt	2131	Apr. 4, 1912
Meiklejohn, Lindsay	Provost	2144	Apr. 10, 1912
Milligan, Morris	Purple Springs	2158	Apr. 19, 1912
Montgomery, Geo.	Clover Bar	2233	Apr. 29, 1912
Miller, Clarence H.	Raymond	2247	May 2, 1912
Moon, William C.	Elkton	2257	May 3, 1912
Mills, Edward H.	Bentley	2258	May 3, 1912
Maxwell, James	Edson	2290	May 29, 1912
Martin, Arthur	St. Paul de Metis	2324	July 12, 1912
Massicotte, Omer	St. Paul de Metis	2325	July 12, 1912
Mullock, James I.	Edmonton	2334	July 16, 1912
Manning, Timothy	Calgary	2343	July 18, 1912
Miller, Chas. C.	Calgary	2344	July 18, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Murphree, William N.	Calgary	2345	July 18, 1912
Moulton, August	Clover Bar	2359	Aug. 12, 1912
Miller, Alex.	Bassano	2363	Aug. 20, 1912
Murray, Thomas H.	Medicine Hat	2400	Oct. 17, 1912
Miller, John	Diamond City	2401	Oct. 17, 1912
Mitchell, Geo. Hy.	Calgary	2406	Oct. 19, 1912
Murray, Jas. H.	Bankhead	2414	Nov. 8, 1912
Mackwood, Samuel	Lethbridge	2419	Nov. 13, 1912
Miller, Ellis G.	Edmonton	2429	Dec. 13, 1912
May, Albert	Bellevue	2433	Dec. 13, 1912
McKernan, Jas.	Edmonton	*28	Oct. 29, 1899
McDonald, Findlay	Sturgeon	*86	Oct. 23, 1900
McLellan, Jno.	Fort Saskatchewan	*93	Nov. 15, 1900
McLeod, M. J.	Fort Saskatchewan	*94	Nov. 15, 1900
McKellar, Jno.	Fort Saskatchewan	*95	Nov. 15, 1900
McKinley, Murdock	Stony Plain	*203	Dec. 18, 1901
McLean, Archibald	Lethbridge	*250	Aug. 18, 1902
McLean, Alix. M.	Calgary	*347	Mar. 9, 1902
McGarry, Fred	Lacombe	*355	Apr. 24, 1903
McDonald, Wm.	Penhold	*369	May 13, 1903
McConnell, Jas. R.	Red Deer	*372	May 13, 1903
McLean, Jas. A.	Star	*539	Apr. 18, 1904
McDiarmid, A. D.	Edmonton	*540	Apr. 18, 1904
McFayden, Jno. R.	Strathcona	*553	June 3, 1904
McDonald, Malcolm	Mountain Hill	*594	Sept. 14, 1904
McLeod, D. J. W.	Strathcona	766	Sept. 11, 1908
McKenzie, Dan	Lacombe	*760	Mar. 24, 1905
McInroy, Paul	Edwell	*773	Mar. 24, 1905
McEachern, Malcolm	Leduc	*792	Mar. 27, 1905
McCathy, Jas.	Calmar	*793	Mar. 27, 1905
McPhail, Jno.	Bellevue	8	Sept. 16, 1905
McDonald, Dan	Morinville	66	Mar. 16, 1906
McLaughlin, Chas.	Namoo	68	Mar. 16, 1906
McCallum, Albert W.	Beaver Lake	95	Apr. 18, 1906
McAnnaly, Peter J.	Crossfield	153	May 31, 1906
McLean, Wm. Jno.	Hillcrest	188	Aug. 13, 1906
McPherson, Jas. P.	Bentley	1416	May 23, 1910
McNutt, Watson	Medicine Hat	262	Apr. 6, 1907
McCune, Oscar	Red Deer	289	May 20, 1907
McGregor, Wm. W.	Blackfalds	298	May 20, 1907
McDonnell, Archie A.	Calgary	339	June 4, 1907
McIvor, David S.	Marwayne	388	June 14, 1907
McWhirter, Jas. A.	Camrose	408	June 14, 1907
McAlister, Donald C.	Lethbridge	1088	Aug. 20, 1909
McDonald, Geo. A.	Pincher Creek	454	July 15, 1907
McAllister, Alfred	Claresholm	468	July 15, 1907
McGhan, Silas S.	Clover Bar	493	Oct. 15, 1907
McLean, Laughlin	Innisfail	512	Oct. 22, 1907
McGuire, Thos.	Lacombe	535	Oct. 28, 1907
McLean, Garnet W.	Calgary	558	Jan. 20, 1908
McPhee, Jno.	Edmonton	596	Apr. 2, 1908
McDonald, Hugh D.	Frank	605	Apr. 8, 1908
McNarland, Robt. Jas.	Granum	608	Apr. 8, 1908
McCutcheon, R. H.	Pincher Creek	631	Apr. 9, 1908
McRae, Duncan A.	Taber	633	Apr. 9, 1908
McRoberts, And.	Pine Lake	644	Apr. 14, 1908
McDougall, Wm.	Mewassin	655	Apr. 22, 1908
McIvor, Wm.	Marwayne	668	Apr. 27, 1908
McDermid, Alex. M.	Elkwater	703	May 14, 1908
McIntosh, Duncan D.	Three Hills	795	Sept. 22, 1908

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
McCall, Samuel D.	Pincher Creek	932	Apr. 1, 1909
McMillan, Hugh A.	Edmonton	943	Apr. 3, 1909
McPherson, Jabez B.	Bentley	946	Apr. 6, 1909
McKenzie, John A.	Edmonton	1067	May 21, 1909
McPherson, Adam	Red Deer	1089	Apr. 24, 1909
McKenzie, Geo.	Lethbridge	1106	Sept. 15, 1909
McKenzie, Wesley J.	Brant	1537	Sept. 28, 1910
McCausland, Chas. A.	Calgary	1457	Aug. 8, 1910
McCallum, Jos.	Beaver Lake	1163	Sept. 29, 1909
McAlister, Donald C.	Diamond City	1228	Mar. 15, 1910
McLaughlin, Lorne	Cardiff	1310	Apr. 8, 1910
McLaughlin, Wm. E.	Okotoks	1329	Apr. 8, 1910
McGibbon, Robt F.	Taber	1374	Oct. 15, 1910
McCauley, Chas.	New Dayton	1426	June 11, 1910
McBlane, Donald	Cowley	1427	June 11, 1910
McPherson, Jno.	Calgary	2209	Apr. 26, 1912
McTighe, Frank B.	Lethbridge	1437	July 8, 1910
McKennan, Felix	Cochrane	1449	July 15, 1910
McKnight, Dan	Calgary	1454	July 29, 1910
McPherson, Alec.	Blairmore	1470	Aug. 31, 1910
McLeod, Jas. W.	Leslieville	1516	Sept. 21, 1910
McLeod, John B.	Innisfall	1517	Sept. 21, 1910
McInroy, Jno. C.	Innisfall	1555	Oct. 17, 1910
McGlenn, Lester S.	Lethbridge	1569	Oct. 20, 1910
McDonald, Wm. F.	Lethbridge	1570	Oct. 19, 1910
McAuley, Dan	Kipp	1621	Mar. 7, 1911
MacKay, Duncan	Sandstone	1655	Mar. 20, 1911
McLean, Jas.	Edmonton	1667	Mar. 25, 1911
McMullin, Alp. L.	Raymond	1682	Mar. 28, 1911
McLeod, Angus	Stettler	1721	Apr. 5, 1911
McLaughlin, Jas. M.	Bassano	1742	Apr. 10, 1911
McLean, Hugh	Cummings	1771	Apr. 21, 1911
McLean, Niven P.	Berseker	1807	May 6, 1911
McGlen, Robt. M.	Lethbridge	1833	May 26, 1911
McDermid, Chas. C.	Alix	1854	June 17, 1911
McKerricher, W. R.	Pincher Creek	1864	June 20, 1911
McCrae, Ern. A.	Lethbridge	1865	June 20, 1911
McLaughlin, Elmer	Edmonton	1896	Aug. 18, 1911
McClennan, Allan	Fishburn	1946	Sept. 9, 1911
McCarty, Jas. S.	Hand Hills	1995	Nov. 16, 1911
McLeod, Fraser	Diamond City	2355	July 19, 1912
McAlduff, Edward	Camrose	2006	Dec. 8, 1911
McCall, Frank M.	Red Willow	2040	Feb. 14, 1912
McCutcheon, Wm.	Strathcona	2047	Feb. 23, 1912
McLellan, Murdoch	Edmonton	2048	Feb. 23, 1912
McGinnis, Jno. W.	Lethbridge	2061	Mar. 13, 1912
McDonald, Robt. A.	Lethbridge	2121	Apr. 2, 1912
McMahon, James F.	Pleasington	2143	Apr. 10, 1912
McDaniel, Hugh C.	Whitla	2182	Apr. 23, 1912
McInnis, William	Cummings	2222	Apr. 29, 1912
McDonald, Wm. A.	Wainwright	2234	Apr. 29, 1912
McRitchie, Murray	Coleman	2267	May 18, 1912
McMillen, Allan D.	Edmonton	2278	May 23, 1912
McClintock, Warren	St. Albert	2317	June 17, 1912
McDonald, Chas. E.	Edmonton	2318	June 17, 1912
MacAuley, William	St. Paul de Metis	2332	July 16, 1912
McPhee, Murdoch	Edmonton	2332	July 16, 1912
McCann, John A.	Calgary	2364	Aug. 20, 1912
McDevitt, Wm. J.	Edmonton	2386	Sept. 27, 1912
McDonald, Angus	Edmonton	2387	Sept. 27, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
McTavish, Hugh R.	Ft. Saskatchewan	2413	Nov. 8, 1912
Nelson, Frank	Wetaskiwin	*60	May 30, 1900
Nichol, David	Innisfail	*191	Dec. 18, 1901
Noyes, Dan. E.	St. Albert	*197	Dec. 18, 1901
Nichols, Jas. J.	Edmonton	*358	May 13, 1903
Niven, Jno.	Lethbridge	*451	Oct. 6, 1903
Nehr, Wm. A.	Edmonton	75	Mar. 26, 1906
Nehr, Henry R.	Edmonton	245	Sept. 28, 1906
Noel, Kenneth E.	Canyon	113	Apr. 25, 1906
Nelson, Wilfred	Calgary	119	Apr. 30, 1906
Nelson, Arthur W.	Edmonton	132	May 10, 1906
Neeb, Louis	Edmonton	161	June 5, 1906
Nichols, Alex. J.	Edmonton	220	Sept. 13, 1906
Neis, Geo. M.	Lamerton	228	Sept. 20, 1906
Norlie, Hackon, C.	Edmonton	501	Oct. 15, 1907
Nixon, Robt. J.	Crossfield	524	Oct. 24, 1907
Neis, Philip	Lamerton	530	Oct. 24, 1907
Neilson, Geo.	Haynes	540	Oct. 28, 1907
Nadeau, T. Eudore	Lavoy	675	Apr. 27, 1908
Nichols, Wm. R.	Edmonton	729	May 26, 1908
Neufeld, Abraham J.	Neopolis	762	Sept. 11, 1908
Neufeld, Peter W.	Noelton	763	Sept. 11, 1908
Neate, Harry	Edmonton	779	Sept. 18, 1908
Newsome, Wm. H.	Calgary	796	Sept. 22, 1908
Norgaard, Peter J.	Calgary	797	Sept. 22, 1908
Norton, Paul	Reid Hill	836	Oct. 2, 1908
Nemsgern, Jno.	Claresholm	837	Oct. 22, 1908
Neville, Fred R.	Mountain View	853	Oct. 6, 1908
Norrie, Jas.	Medicine Hat	1051	May 1, 1909
Nelson, Peter I.	Amisk	1093	Sept. 7, 1909
Naylor, Edward H.	Morinville	1165	Sept. 29, 1909
Nelson, Chrest	Medicine Hat	1186	Dec. 17, 1909
Nicholson, John M.	Lundbreck	1253	Mar. 21, 1910
Neil, N. Walter	Coleman	1471	Aug. 31, 1910
Needham, Harry H.	Edmonton	1606	Jan. 23, 1911
Noble, William Jno.	High River	1656	Mar. 20, 1911
Nelson, Willard T.	Sunnyslope	1722	Apr. 5, 1911
Nichols, John D.	Lethbridge	1788	Oct. 24, 1911
Nelson, Joseph	Brant	2112	Mar. 28, 1912
Noland, Lars	Cardston	2122	Apr. 2, 1912
Nelson, Charles F.	Bonnie Glen	2145	Apr. 10, 1912
Nelson, Ernest W.	Calgary	2210	Apr. 26, 1912
Nothwang, Geo. K.	Edmonton	2217	Apr. 29, 1912
Neufeld, Abram W.	Noelton	2259	May 3, 1912
Neggerson, Edward	Calgary	2279	May 22, 1912
Nelson, Earl Alex.	Calgary	2365	Aug. 20, 1912
Ottewell, Richard P.	Edmonton	*27	Oct. 9, 1899
Omand, Jno.	Edmonton	*522	Apr. 14, 1904
Olsen, H. B.	Ellerslie	*542	Apr. 18, 1904
Oliver, Wesley N.	Wostok	*814	Apr. 14, 1905
Olsen, Gilbert E.	Star	*2358	Aug. 8, 1912
Ottewell, Albert	Clover Bar	77	Mar. 26, 1906
O'Dell, Geo. W.	High River	733	June 22, 1908
Orford, Andrew B.	Macleod	478	July 15, 1907
Oberg, Knute L.	Strathcona	491	Oct. 15, 1907
Oliver, Peter C.	Calgary	562	Jan. 20, 1908
Oakes, Louis D.	Claresholm	567	Mar. 23, 1908
O'Connor, Jno.	Mossleigh	568	Mar. 23, 1908

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Oler, Geo. Jr.	Stirling	602	Apr. 8, 1908
Orser, Jno. R.	Tristram	133	Apr. 9, 1910
O'Reilly, C.	Bells Hill	784	Sept. 18, 1908
Olson, Matz	Wilton Park	817	Sept. 28, 1908
Oster, Carl	Good Hope	818	Sept. 28, 1908
Orr, Alf. E.	Irvine	854	Oct. 6, 1908
Osborne, Homer	Taber	855	Oct. 6, 1908
Orser, Harry	Calgary	883	Mar. 19, 1909
Olsen, Elmer A.	Prairie View	891	Mar. 24, 1909
Ostby, Anton	Strathmore	1027	Apr. 28, 1909
O'Brien, Roy	Raymond	1107	Sept. 15, 1909
Orr, Joshua	Irvine	1154	Sept. 28, 1909
Ostlund, Gustav	Stirling	1231	Mar. 15, 1910
O'Connell, Patrick B.	Raymond	1317	Apr. 7, 1910
Ohlson, Carl L.	Millarville	1409	May 19, 1910
Ohrn, Carl H.	Ohrnville	1557	Oct. 17, 1910
Omang, Carl A.	Stettler	1675	Mar. 24, 1911
Ostby, Charles	Mik River	1688	Mar. 29, 1911
Ormson, Joseph J.	Ryley	1699	Mar. 31, 1911
Orr, Fred	Canmore	2280	May 22, 1912
Oliver, Robt. T.	Grassy Lake	1705	Mar. 31, 1911
O'Connor, Pat. J.	Carlstadt	1744	Apr. 10, 1911
Odell, Ed.	Calgary	1822	May 20, 1911
Ottewell, Arthur J.	Clover Bar	1894	Aug. 16, 1911
Olsen, J. Gilbert	Burdett	1915	Aug. 24, 1911
Olson, Albert Jos.	Coleman	2030	Jan. 16, 1912
O'Daniels, John W.	Coaldale	2064	Mar. 13, 1912
O'Rourke, John O.	Irma	2104	Mar. 25, 1912
Olberg, Christian	Holden	2199	Apr. 24, 1912
O'Neil, Thomas A.	Mile 43	2238	Apr. 30, 1912
Ottewell, Wm. R.	Clover Bar	2264	May 8, 1912
Olson, Frank Oscar	Calgary	2346	July 18, 1912
Oxford, Stephen	Edmonton	2388	Sept. 27, 1912
Oaks, John W.	Edmonton	2430	Dec. 13, 1912
Pierce, Geo. J.	Red Deer	*46	Mar. 8, 1900
Pearce, Jas.	Edmonton	*81	Oct. 23, 1900
Putman, Albert E.	Edmonton	*202	Dec. 18, 1901
Powell, Jas. A.	Edmonton	*208	Dec. 18, 1901
Pearce, Wm.	Edmonton	*229	Apr. 23, 1902
Pimm, Jno.	Lethbridge	*258	Aug. 18, 1902
Pullshiy, Wm.	Star	*384	June 23, 1903
Pullesen, Peter	Calgary	*492	Mar. 14, 1904
Piper, F. E.	Red Deer	*546	Apr. 18, 1904
Porter, Gerard A.	Red Deer (dup.)	*851	June 6, 1905
Peterson, Robt. F.	Wetaskiwin	*789	Mar. 27, 1905
Pipegrass, Fred'k.	Raymond	24	Sept. 16, 1905
Pearson, Herbert S.	Red Deer	62	Dec. 29, 1905
Pefluger, Geo.	Wetaskiwin	98	Apr. 20, 1906
Peterson, Martin E.	Claresholm	179	Aug. 13, 1906
Pitmann, Wm. T.	Wetaskiwin	279	May 15, 1907
Pratt, Arthur W.	Three Hills	300	May 23, 1907
Patterson, Johnston	Strathcona	308	May 23, 1907
Pyle, Joshua	Langdon	354	June 4, 1907
Peterson, Alfred L.	Heather Brae	397	June 14, 1907
Phillips, Fred H.	Frank	476	July 15, 1907
Pyypow, Wasyl	Star	504	Oct. 15, 1907
Prehn, Emil N.	Strome	508	Oct. 15, 1907
Peterson, Fred. A.	Wetaskiwin	529	Oct. 28, 1907
Page, Sam. Jas.	Lacombe	532	Oct. 28, 1907

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Pethick, Roy W.	Okotoks	1331	Apr. 8, 1910
Pozin, Otto E.	Claresholm	577	Mar. 23, 1908
Peat, Geo. A.	Lethbridge	611	Apr. 8, 1908
Power, Eugene	Lethbridge	615	Apr. 8, 1908
Peat, Jas. T.	Lethbridge	619	Apr. 8, 1908
Phillips, Walter I.	Magrath	620	Apr. 9, 1908
Peters, Andy	Blairmore	621	Apr. 9, 1908
Peterson, Anton	Evarts	638	Apr. 14, 1908
Parker, Ed. W.	Innisfail	642	Apr. 14, 1908
Piersall, Wm. S.	Harmattan	646	Apr. 14, 1908
Putnam, Orlean E.	Edmonton	666	Apr. 27, 1908
Pfitzeumier, Herman	Stettler	687	May 1, 1908
Pall, Jos., Jr.	Prague	717	May 18, 1908
Phillips, Wm. J.	Clover Bar	725	May 18, 1908
Papineau, Francis C.	Battle Lake	727	May 18, 1908
Parker, David L.	Penhold	753	Sept. 3, 1908
Parmelee, J. M.	Bluff Centre	771	Sept. 14, 1908
Park, Hugh A.	Placington	785	Sept. 18, 1908
Parsons, Harry	Okotoks	1234	Mar. 15, 1910
Philpot, Jos.	Bawlf	807	Sept. 25, 1908
Podgarmy, Mike	Leduc	819	Sept. 28, 1908
Porter, Wm.	Stavely	838	Oct. 2, 1908
Peak Jos. H.	Pokahasset	870	Nov. 26, 1908
Payzant, Jno. M.	Edmonton	873	Dec. 23, 1908
Paul, Karl.	Strathcona	880	Mar. 4, 1909
Prout, Thos. R.	Medicine Hat	904	Mar. 26, 1909
Peterson, Martin O.	Hicksburg	937	Apr. 2, 1909
Passmore, Thos. A.	Content	964	Apr. 25, 1909
Pouilot, Emil E.	Taber	1014	Apr. 25, 1909
Pickering, Geo.	Canmore	1030	Apr. 28, 1909
Pierce, Alfred	Lamont	1040	Apr. 29, 1909
Parsons, Henry	Lac Ste. Anne	1041	Apr. 29, 1909
Purmal, Jacob	Medicine Hat	1052	May 1, 1909
Paget, Thos. J.	Claresholm	1128	Sept. 21, 1909
Pallot, Harold E.	Edmonton	1212	Mar. 7, 1910
Powell, John	Lucky Strike	1233	Mar. 7, 1910
Paulsons, Paul	Lethbridge	1237	Mar. 15, 1910
Pattinson, Geo.	Frank	1254	Mar. 21, 1910
Parkin, David	Macleod	1268	Mar. 28, 1910
Piepgas, Valdemar	Raymond	1318	Apr. 7, 1910
Pearson, Richard V.	Okotoks	1330	Apr. 8, 1910
Puntus, Frank	Airdrie	1340	Apr. 1, 1910
Paradis, Felix	Tofield	1349	Apr. 13, 1910
Parker, John W.	Bow Island	1379	Apr. 19, 1910
Perks, Chas.	High River	1410	Apr. 19, 1910
Phillips, Wm.	Calgary	1451	July 15, 1910
Purcell, Frank	Taber	1510	Sept. 21, 1910
Peterson, Emil	Heatherbrae	1538	Sept. 28, 1910
Parker, Ralph A.	Lewisville	1544	Oct. 7, 1910
Potter, John	Royton	1533	Oct. 17, 1910
Pearce, Gilbert E.	Edmonton	1561	Oct. 19, 1910
Parson, Howard E.	Pine Creek	1604	Jan. 20, 1911
Pike, Fred G.	Edmonton	168	Mar. 22, 1911
Pederson, S. M.	Warner	1689	Mar. 29, 1911
Prouty, Hiram	Lost Lake	1700	Mar. 31, 1911
Peterson, Soreng	Hand Hills	1745	Apr. 10, 1911
Porter, J. E.	Medicine Hat	1757	Apr. 15, 1911
Parnell, Fred. R.	Medicine Hat	1758	Apr. 15, 1911
Phillips, Harvey G.	Cardiff	1772	Apr. 21, 1911
Pratt, William W.	Ponoka	1856	June 17, 1911

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Pomarleau, Louis	Burdett	1857	June 20, 1911
Potter, Thomas	Raymond	1866	June 20, 1911
Palmer, Henry A.	Calgary	1902	Aug. 22, 1911
Pradon, Jean M.	Strathcona	1921	Aug. 25, 1911
Peterson, Peter	Warner	1948	Sept. 9, 1911
Parro, Louis	Lacombe	1990	Nov. 11, 1911
Pratt, Fred.	Lethbridge	2002	Nov. 17, 1911
Proughton, Donald G.	Elm Park	2010	Dec. 12, 1911
Palar, Henry	Warner	2065	Mar. 13, 1912
Perdue, Nelson	Tofield	2103	Mar. 25, 1912
Pittman, John W.	Warner	2151	Apr. 16, 1912
Pease, Fred	Milk River	2152	Apr. 16, 1912
Pratt, Fred	Camrose	2169	Apr. 20, 1912
Porter, Charles D.	Medicine Hat	2183	Apr. 23, 1912
Putnam, Philetus	Claresholm	2248	May 2, 1912
Patton, Jno. P.	Blairmore	2268	May 18, 1912
Parkening, Amil	Tilley	2347	July 18, 1912
Peterson, Peter	Edmonton	2366	Aug. 27, 1912
Pettley, Daniel R.	Taber	2370	Sept. 17, 1912
Pinckney, Fred	Medicine Hat	2371	Sept. 17, 1912
Pentzer, Henry W.	Calgary	2374	Sept. 19, 1912
Porter, Joshua	Wetaskiwin	2417	Nov. 12, 1912
Pilgrim, Hy. Howard	Edmonton	2431	Dec. 13, 1912
Palmer, Raymond N.	Calgary	2439	Dec. 18, 1912
Quigley, Thos.	Cochrane	546	Nov. 22, 1907
Quigley, Jas. S.	Cochrane	874	Dec. 31, 1908
Quinn, Wm. B.	Edmonton	1188	Dec. 27, 1909
Quick, Elbert K.	Sundial	1237	Mar. 15, 1910
Quesseth, Geo. O.	Meeting Creek	1435	July 6, 1910
Quinlan, John A.	Hillcrest	2082	Mar. 18, 1912
Quick, Nels	Whitla	2188	Apr. 23, 1912
Robinson, Jno.	Edmonton	*26	Oct. 9, 1899
Rutherford, Jno.	Medicine Hat	1549	Oct. 17, 1910
Ross, Thos. G.	Poplar Lake	*97	Nov. 15, 1900
Ratray, Archie B.	Edmonton	*108	Dec. 15, 1900
Rafie, Andrew	Bon Accord	*301	Oct. 2, 1902
Ryan, James	Wetaskiwin	*316	Oct. 22, 1902
Redig, Valentine	Lacombe	*514	Apr. 18, 1904
Rivet, Arthur	Morinville	*549	May 26, 1904
Ramsay, Jas.	Coleman	620	Oct. 27, 1905
Rice, Geo. A.	Strathcona	39	Sept. 18, 1905
Rath, Edw. L.	Conjuring Creek	93	Apr. 11, 1906
Read, Edgar A.	Manfred	102	Apr. 20, 1906
Reese, Harry E.	Wetaskiwin	137	May 10, 1906
Roulston, Robt.	Bowden	160	May 31, 1906
Robearge, Wm.	Vegreville	215	Sept. 13, 1906
Rorem, T. A.	Duhamel	1760	Apr. 18, 1911
Rockstad, Abraham	Wetaskiwin	247	Oct. 5, 1906
Rath, Ernest W.	Conjuring Creek	277	May 15, 1907
Royle, Wm. H.	Calgary	347	June 4, 1907
Ramey, Morgan	Vegreville	382	June 14, 1907
Reay, Jno. G.	Lamerton	391	June 14, 1907
Robinson, N. J.	DeWinton	425	June 19, 1907
Rydberg, Emil W.	Glenview	432	June 19, 1907
Richards, Wm.	Lundbreck	920	Mar. 30, 1909
Rice, Wm.	Andrew	500	Oct. 15, 1907
Rear, Chas. W.	Mayton	645	Apr. 14, 1908
Raymer, Oliver	Didsbury	653	Apr. 15, 1908

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Russell, Chas. O.	Brockville	695	May 6, 1908
Ramsey, Ralph H.	Vegreville	722	May 18, 1908
Rix, Percy H.	Wetaskiwin	728	May 26, 1908
Rattray, Alex.	Dog Pound	764	Sept. 11, 1908
Rude, Jno. N.	Priddis	804	Sept. 24, 1908
Ronaghan, Albert H.	Vermilion	820	Sept. 28, 1908
Reid, Jas. Robt.	Claresholm	839	Oct. 2, 1908
Rigby, Wm. T.	Claresholm	840	Oct. 2, 1908
Rills, Wilson, H.	Claresholm	841	Oct. 2, 1908
Richards, Neal S.	Aetna	857	Oct. 6, 1908
Rattray, Thos. A., Jr.	Edmonton	*550	May 26, 1904
Ritchie, John	Calgary	884	Mar. 19, 1909
Rothwell, John T.	Lethbridge	896	Mar. 24, 1909
Robinson, Wm.	Edmonton	940	Apr. 3, 1909
Russell, John	Gaetz Valley	947	Apr. 6, 1909
Rice, Augustus M.	Carmangay	972	Apr. 16, 1909
Riches, Chas. B.	Edmonton	984	Apr. 20, 1909
Redshaw, Arthur R.	Lethbridge	1055	May 3, 1909
Robinson, H. M.	Lethbridge	1059	May 4, 1909
Rundgren, John S.	Edmonton	1076	May 26, 1909
Robertson, Frank E.	Gleichen	1130	Sept. 21, 1909
Roy, Jos. R.	Stony Plain	147	Sept. 25, 1909
Reimer, Henry H.	Neapolis	1200	Mar. 4, 1910
Romell, Geo. H.	Stirling	1238	Mar. 15, 1908
Reilly, Thos.	Coal City	1239	Mar. 15, 1910
Richards, Peter W.	Lethbridge	1240	Mar. 15, 1910
Rice, Aaron R.	Claresholm	1279	Mar. 29, 1910
Ross, John P.	Granum	1282	Mar. 30, 1910
Reed, David	Rimbey	1294	Apr. 1, 1910
Robertson, Geo. H.	Hamilton	1397	Apr. 25, 1910
Ritchie, Wm. O.	Strathcona	1444	July 14, 1910
Roberts, Edward Ivor	Strathcona	1445	July 14, 1910
Rhimes, Robt.	Calgary	1458	Aug. 8, 1910
Roth, Chas.	Strome	1461	Aug. 15, 1910
Robertson, Mark W.	Kitscoty	1462	Aug. 24, 1910
Robertson, Jas. M.	Calgary	1527	Sept. 23, 1910
Reid, John E.	Eagle Butte	1535	Sept. 24, 1910
Robertson, Alex.	Calgary	1600	Jan. 13, 1911
Reed, Edwin L.	Passburg	1603	Jan. 14, 1911
Remington, Otto C.	Milk River	1690	Mar. 29, 1911
Restfall, Fred.	Bassano	1746	Apr. 10, 1911
Rolfson, Sam. G.	Comrey	1789	Apr. 24, 1911
Rorney, Andrew	Noble	1790	Apr. 24, 1911
Rauds, Harry	Macleod	1791	Apr. 24, 1911
Radway, Orlando S.	Radway Centre	1816	May 18, 1911
Rawson, George	Suffield	1836	May 26, 1911
Rolfe, Lyman	Bow Island	1867	June 20, 1911
Raw, Frank	Calgary	1883	July 19, 1911
Rusk, Andrew P.	New Dayton	1916	Aug. 24, 1911
Richfield, Floyd I.	Macleod	1917	Aug. 24, 1911
Rice, Martin	Grassy Lake	1949	Sept. 9, 1911
Radloff, Adolff	Edmonton	1965	Oct. 18, 1911
Richards, Thomas	Calgary	2042	Feb. 14, 1912
Ramsay, Wm. John	Lethbridge	2066	Mar. 13, 1912
Roland, Geo.	Lille	2083	Mar. 18, 1912
Rich, George	Granum	2094	Mar. 22, 1912
Robertson, Mark W.	Cardiff	2105	Mar. 25, 1912
Ramsay, Robert	Strathcona	2118	Apr. 1, 1912
Rasmussen, Arnold	Standard	2134	Apr. 4, 1912
Reynolds, Geo. P.	Ferintosh	2170	Apr. 20, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Roman, Ned	Thelma	2184	Apr. 23, 1912
Reed, Guy	Irma	2200	Apr. 24, 1912
Ross, Wm. Hope	Calgary	2211	Apr. 26, 1912
Roberts, John	Calgary	2212	Apr. 26, 1912
Rowell, James	Calgary	2213	Apr. 26, 1912
Rizzuto, Thomas	Edmonton	2221	Apr. 29, 1912
Reedholm, Victor	Edmonton	2237	Apr. 30, 1912
Ross, Robert McKay	Innisfail	2260	May 3, 1912
Robinson, Miles H.	Calgary	2281	May 22, 1912
Rutherford, Chas. E.	Bickerdike	2291	May 29, 1912
Roberts, David O.	Strathcona	2292	May 29, 1912
Rhodes, Edgar	Calgary	2302	June 11, 1912
Rich, Lewis B.	Brocket	2307	June 14, 1912
Ritchie, John R.	Atha. Landing	2323	June 28, 1912
Robin, Victor E.	Edson	2378	Sept. 20, 1912
Robinson, Elwin D.	St. Albert	2379	Sept. 20, 1912
Rimmer, George	Calgary	2440	Dec. 18, 1912
Stadelbauer, Simon	Spruce Grove	*4	Sept. 18, 1899
Stewart, Thos. H.	Strathcona	*30	Oct. 9, 1899
Smith, Wm. F.	Athabasca Landing	*38	Nov. 28, 1899
Shaw, Jno. Y.	Midnapore	*40	Dec. 1, 1899
Saunders, Elias T.	Lethbridge	*47	Mar. 23, 1900
Snider, Jno. B.	Okotoks	*68	July 19, 1900
Steffles, Fred	Morinville	*90	Nov. 15, 1900
Schlegel, Frank	Duhamel	*118	Jan. 26, 1901
Stewart, Archie	Edmonton	*161	Sept. 7, 1901
Stulz, Frank	St. Albert	*196	Dec. 18, 1901
Staffles, Jos.	Morinville	*91	Nov. 15, 1900
Simpson, Robt. N.	Edmonton	*198	Dec. 18, 1901
Smith, Sam. W.	Leduc	*228	Apr. 23, 1902
Still, Wm.	Vegreville	*328	Dec. 18, 1902
Stewart, Jas. A.	Beaver Lake	*329	Dec. 18, 1902
Shields, Wm. K.	Strathcona	*363	May 13, 1903
Smith, Larent E.	Ponoka	*387	July 13, 1904
Schatz, Robt.	Strathcona	*635	Oct. 15, 1904
Swift, W. L.	Edmonton	*647	Oct. 15, 1904
Sloan, Wm. J.	Calgary	*145	May 1906
Swingle, Walter A.	Didsbury	*751	Mar. 24, 1905
Scott, Geo. W.	Innisfail	*758	Mar. 24, 1905
Spannel, Jno.	Leduc	*796	Mar. 27, 1905
Scott, Sam R.	Olds	*797	Mar. 28, 1905
Stafford, Jno.	Sollman	*817	Apr. 14, 1905
Short, Walker	Mewassin	*826	May 13, 1905
Scullli, Angelo	Lille	1453	Aug. 25, 1910
Skouson, Z. N.	Raymond	21	Sept. 16, 1905
Skouson, Peter N.	Raymond	25	Sept. 16, 1905
Sherwood, L. H.	Beaumont	29	Sept. 16, 1905
Swedfeger, Amos	Leduc	41	Sept. 18, 1905
Svarich, Peter	Kolomea	76	Mar. 26, 1906
Suru, Jno	Edmonton	78	Mar. 26, 1906
Schroeder, Ed. H.	High River	120	Apr. 30, 1906
Sherlin, Adam	Red Deer	128	Mar. 4, 1906
Smith, Chas. W.	Foreman	131	May 10, 1906
Stephenson, Jas. McC.	Innisfail	155	May 31, 1906
Speakman, Alfred	Penhold	159	May 31, 1906
Sanders, T. Aron	Cardston	166	Aug. 11, 1906
Stephens, Jas.	Frank	175	Aug. 13, 1906
Stannk, Isadore	Frank	176	Aug. 13, 1906
Stillman, Geo. F.	Spring Point	181	Aug. 13, 1906

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Stuckney, Richard	Pincher Creek	185	Aug. 13, 1906
Scribner, Jos.	Leavings	190	Aug. 13, 1906
Smith, Jno. H.	Nanton	195	Aug. 13, 1906
Stevens, H. E.	Macleod	202	Aug. 13, 1906
Smith, David H.	Calgary	206	Aug. 25, 1906
Somerset, Robt. N.	Vermilion	210	Sept. 13, 1906
Smith, Jno.	Pakan	240	Sept. 27, 1906
Stevens, Harry L.	Olds	211	Sept. 13, 1906
Small, Jesse J.	Didsbury	243	Sept. 26, 1906
Scarth, Walter	Calgary	269	Apr. 29, 1906
Santroek, J. M.	Edmonton	269	Apr. 29, 1907
Sorenson, Nels G.	Kellman	283	May 15, 1907
Smith, Chas. A.	Red Deer	285	May 15, 1907
Smith, Sam. T.	Leslieville	287	May 20, 1907
Schmidt, Henry W.	Red Deer	288	May 20, 1907
Salzl, Rudolph	Morinville	307	May 23, 1907
Swingle, Gala R.	Didsbury	310	May 29, 1907
Scott, Wm.	Three Hills	321	May 29, 1907
Stagg, Jno. C.	Calgary	805	Sept. 22, 1908
Stearns, Chas. A.	Carstairs	356	June 4, 1907
Siddall, Wm. M.	Neapolis	360	June 4, 1907
Saunders, Abraham	Lacombe	372	June 7, 1907
Stevens, Clostin H.	Erskine	378	June 7, 1907
Swan, Jno.	Wessington	379	June 7, 1907
Scoville, Wm. A.	Earling	413	June 14, 1907
Schattschneider, Herman	Ellerslie	415	June 14, 1907
Sinclair, Donald	Cayley	422	June 19, 1907
Sallendach, Robt.	Brant	427	June 19, 1907
Sparrow, Jas. W.	Lethbridge	440	June 20, 1907
Stuenkel, Jas. F.	Claresholm	452	July 15, 1907
Svean, Ole	Claresholm	483	Aug. 13, 1907
Salmon, Jno. F.	Raymond	458	July 15, 1907
Spencer, Jno. H.	Medicine Hat	480	July 24, 1907
Somerset, Thos. B.	Edmonton	494	Oct. 15, 1907
Santroek, Harvey S.	Edmonton	498	Oct. 15, 1907
Skolitzky, Jno. J.	Calgary	520	Oct. 24, 1907
Spreeman, Allen	Didsbury	522	Oct. 24, 1907
Skirkey, Jno. W.	Lacombe	534	Oct. 28, 1907
Simmonds, Henry	Banff	547	Nov. 26, 1907
Stanworth, Stephen	Bankhead	549	Dec. 5, 1907
St. George, Stephen	Macleod	607	Apr. 8, 1908
Schroeder, Waldemer	Macleod	604	Apr. 8, 1908
Simpson, David A.	Macleod	622	Apr. 9, 1908
Sorenson, Willard	Leavitt	629	Apr. 9, 1908
Speight, Frank	Red Deer	637	Apr. 14, 1908
Sawatzky, Bernard P.	Didsbury	650	Apr. 15, 1908
Slater, Alfred	Medicine Hat	661	Apr. 27, 1908
Saunders, Wallace	Conjuring Creek	674	Apr. 27, 1908
Stearns, Harvey N.	Innisfree	679	Apr. 27, 1908
Scoonover, Frank	Content	688	May 1, 1908
Story, Hillard M.	Talbot	692	May 6, 1908
Stinson, Fred	Hastings Coulee	706	May 18, 1908
Svarich, And.	Vegreville	723	May 18, 1908
Snyder, Jacob F.	Magrath	749	Aug. 26, 1908
Sanborn, Francis A.	Innisfail	758	Sept. 8, 1908
Stephen, J. G.	Edmonton	780	Sept. 18, 1908
Sheffiel, David	Edmonton	821	Sept. 21, 1908
Shandro, Andrew S.	Shandro	822	Sept. 28, 1908
Stafford, Geo. F.	Pincher Creek	858	Oct. 6, 1908
Steinhauer, Augustine	Saddle Lake	866	Oct. 27, 1908

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Smith, Anthony A.	Knee Hill	889	Mar. 20, 1909
Steeves, Lorne W.	Lethbridge	894	Mar. 24, 1909
Schwartz, Chas.	Lille	921	Mar. 30, 1909
Suitor, Wm.	Gladys	938	Apr. 2, 1909
Stroud, W. D.	Crossfield	948	Apr. 6, 1909
States, John G.	Carstairs		
Smedstad, John	Claresholm	949	Apr. 6, 1909
Schumers, Louis	Willing	973	Apr. 16, 1909
Stern, Fred	Bawlf	992	Apr. 20, 1909
Stenberg, Fred	Harland	1002	Apr. 22, 1909
Snyder, Chas. G.	Calgary	1003	Apr. 22, 1909
Scott, Geo. T.	Gleichen	1028	Apr. 28, 1909
Scarr, Jos. A.	Bankhead	1029	Apr. 28, 1909
Sampert, Julius	Bruderheim	1342	Apr. 11, 1910
Scott, Fred	Strathcona	1042	Apr. 29, 1909
Schaumleffel, John	Lloydminster	1068	May 21, 1909
Stein, Philip	Lethbridge	1069	May 21, 1909
Stubbs, Albert W.	Medicine Hat	1073	May 26, 1909
Scarfe, Wm. H. T.	Innisfail	1082	June 18, 1909
Sheppard, Frank H.	Wetaskiwin	1090	Aug. 24, 1909
Samis, Chas.	Calgary	1096	Sept. 7, 1909
Schench, Wm. A.	Thigh Hill	1133	Sept. 21, 1909
Simon, Herbert	Nanton	1134	Sept. 21, 1909
Sommersgill, Robt.	Calgary	1135	Sept. 21, 1909
Spencer, Fred.	Cardston	1141	Sept. 24, 1909
Smith, John	Kitscoty	1148	Sept. 25, 1909
St. John, Myron	Edmonton	1166	Sept. 29, 1909
Sinclair Clarence	Coaldale	1242	Mar. 15, 1910
Smith, Leslie E.	Lethbridge	1243	Mar. 15, 1910
Schinnour, Gustav.	Grassy Lake	1244	Mar. 15, 1910
Stuckey, Wilfred F.	Pincher Creek	1262	Mar. 21, 1910
Sheffield, Geo.	Macleod	1269	Mar. 28, 1910
Strey, Nelson	Lacombe	1295	Apr. 1, 1910
Snyder, Perry	Pakan	1311	Apr. 6, 1910
Symon, Lindsay	Edmonton	1811	May 16, 1910
Saville, Walter G.	Calgary	1341	Apr. 11, 1910
Steven, Robt. T.	Strathcona	1350	Apr. 13, 1910
Sparks, Geo. A.	Edmonton	1351	Apr. 13, 1910
Smith, Oscar H.	Lethbridge	1364	Apr. 14, 1910
Stone, Wm. N.	Langdon	1380	Apr. 21, 1910
Spencer, Geo.	Calgary	1402	Apr. 28, 1910
Sagomen, Peter E.	Chauvin	1406	May 17, 1910
Silver, John A.	Lethbridge	1413	May 21, 1910
Stallworthy, Wm.	Calgary	1430	June 14, 1910
Savage, Wm. John	Cardston	1438	July 8, 1910
Smith, Henry	Calgary	1456	Aug. 4, 1910
Selwood, Wm. H.	Welsdale	1463	Aug. 24, 1910
Scott, Michael D.	Cayley	1489	Sept. 6, 1910
Sand, Oscar L.	Dina	1505	Sept. 21, 1910
Stewart, Wm. A.	Gilpin	1506	Sept. 21, 1910
Spencer, Thos. E.	Wetaskiwin	1545	Oct. 7, 1910
Shantz, Alson S.	Didsbury	1554	Oct. 17, 1910
Stobbs, Henry	Medicine Hat	1571	Oct. 20, 1910
Smith, John K.	Calgary	1576	Oct. 20, 1910
Smeltzer, Geo. E.	Taber	2160	Apr. 19, 1912
Steeves, Robert	Cleversville	1540	Oct. 3, 1910
Steeves, Robert	Cleversville	1841	May 26, 1911
Snyder, Amasa	Edmonton	1607	Jan. 23, 1911
St. Peter, Moses	Macleod	1639	Mar. 15, 1911
Synder, Clarence E.	Pincher Creek	1640	Mar. 15, 1911

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Stilling, Samuel K.	Three Hills	1658	Mar. 20, 1911
Sergeant, Ed. D.	Calgary	1659	Mar. 20, 1911
Saunders, Chas. O.	Okotoks	1660	Mar. 20, 1911
Stanley, Sans. E.	Calgary	1661	Mar. 20, 1911
Store, William	Calgary	1662	Mar. 20, 1911
Sheardown, Henry	Lorraine	1676	Mar. 24, 1911
Solie, Halbert L.	Warner	1691	Mar. 29, 1911
Sweet, Charles	Grassy Lake	1707	Mar. 31, 1911
Smyrick, Jos.	Grassy Lake	1708	Mar. 31, 1911
Stephens, S. E.	Ponoka	1723	Apr. 5, 1911
Skallin, Olaf	Pretty Hill	1724	Apr. 5, 1911
Shernak, Chas. J.	Camrose	1725	Apr. 5, 1911
Scott, John S.	Bashaw	1726	Apr. 5, 1911
Seward, Gale	Strome	1727	Apr. 5, 1911
Shields, David W.	Carlstadt	1747	Apr. 10, 1911
Schroeder, Alex.	Beaver Hills	1773	Apr. 21, 1911
Smith, Thomas M.	Edmonton	1774	Apr. 21, 1911
Smith, J. Edgar	Noble	1794	Apr. 24, 1911
Schrieber, John	Taber	1793	Apr. 24, 1911
Stephens, Samuel	Carmangay	1799	Apr. 26, 1911
Stewart, Joseph	Irricana	1808	May 6, 1911
Soetje, Henry	Chinook	1824	May 20, 1911
Smith, Albert A.	Magrath	1839	May 26, 1911
Spangrud, Emil	Pincher Creek	1940	May 26, 1911
Smiley, Levy	Calgary	1852	June 13, 1911
Stackhouse, Wm. C.	Edmonton	1869	June 26, 1911
Sebern, Horance E.	Edmonton	1872	July 12, 1911
Smeaton, Andrew	Calgary	1903	Aug. 22, 1911
Sorenson, Charles	Lethbridge	1918	Aug. 24, 1911
St. Peter, J. F.	Diamond City	2361	Aug. 14, 1912
Stevens, George N.	Calgary	1939	Sept. 8, 1911
Skelton, Fred A.	Wheat Centre	1950	Sept. 9, 1911
Slevinski, Alex.	Mundare	1956	Sept. 9, 1911
Spallin, Joseph	Fort Saskatchewan	1957	Sept. 9, 1911
Selwood, Wm. H.	Clover Bar	1966	Oct. 18, 1911
Shields, Jas. R.	Edmonton	1987	Nov. 10, 1911
Smith, Samuel George	Huxley	2003	Nov. 25, 1911
Smith, John	Edmonton	2022	Dec. 31, 1911
Sommers, Delbert	Lawrence	1241	Mar. 15, 1910
Sommers, Delbert	Lawrence	2153	Apr. 16, 1912
Shidler, Elmer H.	Cardston	1319	Apr. 7, 1910
Shidler, Elmer H.	Cardston	2033	Feb. 14, 1912
Schrieber, William	Eyremore	1709	Mar. 31, 1911
Schrieber, William	Eyremore	2159	Apr. 19, 1912
Stoner, Orville W.	Strathcona	1922	Aug. 25, 1912
Stoner, Orville W.	Strathcona	2106	Mar. 25, 1912
Scott, Wilbert W.	Summerview	2084	Mar. 18, 1912
Scott, Frank	Gleichen	2132	Apr. 4, 1912
Sears, Thomas	Dalroy	2133	Apr. 4, 1912
Spoucler, W. J.	Reid Hill	2154	Apr. 16, 1912
Sand, Elmer N.	Edburg	2171	Apr. 20, 1912
Strong, Ross D.	Burdett	2185	Apr. 23, 1912
Scully, Daniel	Seven Persons	2186	Apr. 23, 1912
Sillib, Walter	Whitlaw	2187	Apr. 23, 1912
Sinclair, E. R.	Medicine Hat	2189	Apr. 23, 1912
Stuart, James E.	Edmonton	2227	Apr. 29, 1912
Stuart, James E.	Edmonton	2390	Sept. 27, 1912
Smart, Charles C.	Crossfield	2240	May 1, 1912
Strang, Andrew R.	Carbon	2241	May 1, 1912
Stuart, Wm. G.	Coaldale	2245	May 2, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Sherret, Charles	Lethbridge	2249	May 2, 1912
Stewart, Andrew	Calgary	2282	May 22, 1912
Skark, Jans.	Calgary	2283	May 22, 1912
Smith, Jno. Wesley	Calgary	2303	June 11, 1912
Sherwood, Ralph O.	St. Albert	2319	June 17, 1912
Schafer, Melvan O.	Edmonton	2335	July 16, 1912
Scarr, Claude J.	Bankhead	2348	July 18, 1912
Spencer, James	Calgary	2373	Sept. 19, 1912
Silver, William	St. Albert	2380	Sept. 20, 1912
Stingle, Albert W.	Edmonton	2389	Sept. 27, 1912
Stone, William	Edmonton	2395	Oct. 7, 1912
Scanlin, Edward	Bassano	2403	Oct. 19, 1912
Trimble, H. W.	Red Deer	*195	Dec. 18, 1901
Townsend, R. C.	Canmore	*314	Oct. 20, 1902
Turner, Leonard J.	Gleichen	469	Nov. 6, 1908
Terry, Peter	Okotoks	*470	Nov. 6, 1903
Turnbull, Robt.	Strathcona	*519	Apr. 8, 1904
Trussler, A. E.	Highland Park	*612	Sept. 27, 1904
Tennison, Jno. C.	Leduc	*722	Mar. 3, 1905
Tribel, Clarence A.	Red Deer	*782	Mar. 24, 1905
Tillapaugh, Jno.	Warwick	48	Sept. 23, 1905
Tanner, Wm. Jos.	Raymond	15	Sept. 16, 1905
Thomas, A. I.	Frank	890	Mar. 24, 1909
Treasure, Sam.	Claresholm	58	Dec. 19, 1905
Tremblay, Miles I.	Edmonton	73	Mar. 26, 1906
Taylor, David A.	Red Deer	162	July 7, 1906
Tufts, Josiah	Taber	187	Aug. 13, 1906
Turner, Ernest H.	Warwick	214	Sept. 3, 1906
Towers, Fred J.	Red Deer	299	May 20, 1907
Traub, Wm.	Didsbury	325	May 29, 1907
Telford, Ernest E.	Vermilion	330	May 31, 1907
Tennant, Wm. J.	Calgary	350	June 4, 1907
Thompson, Geo. A.	Red Willow	374	June 7, 1907
Tiede, August	Stettler	375	June 7, 1907
Trussler, A. D.	Strathcona	416	June 14, 1907
Thrum, Chas. W.	High River	433	June 19, 1907
Turner, Geo. H.	Taber	445	July 15, 1907
Tucker, Glines	Stavelly	1843	May 29, 1911
Tollestrup, Christian F.	Raymond	472	July 15, 1907
Thwaytes, Lance'ot	Edmonton	497	Oct. 15, 1907
Tewsley, Jas. S.	Carstairs	525	Oct. 24, 1907
Thompson, Thos. G.	Edmonton	589	Apr. 2, 1908
Turnbull, W. N.	Penhold	634	Apr. 14, 1908
Taylor, Orrin O.	Harmattan	647	Apr. 14, 1908
Tidball, Wm. E.	Carstairs	651	Apr. 15, 1908
Taylor, Wm. L.	Killam	705	May 18, 1908
Thronsdon, Theo.	Camrose	714	May 18, 1908
Teardiff, Jos. E.	Fort Vermilion	743	Aug. 6, 1908
Toeews, Cornelius F.	Stern	765	Sept. 11, 1908
Tronnes, Peter	Dorendee	808	Sept. 2, 1908
Todd, Walker	Macleod	1270	Mar. 28, 1910
Taylor, Wm. J.	Lochinvar	976	Apr. 17, 1909
Trono, Louis	Canmore	1032	Apr. 28, 1909
Trono, Emile	Canmore	1033	Apr. 28, 1909
Townsend, Leon E.	Stirling	1085	July 16, 1909
Thomas, Wm. H.	Lloydminster	1167	Sept. 29, 1909
Todd, Wm.	Edmonton	2053	Feb. 29, 1912
Tillapaugh, John F.	Vegreville	1169	Sept. 29, 1909
Tanner, Jas.	Macleod	1272	Mar. 28, 1910

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Taylor, Henry G.	Ponoka	1296	Apr. 1, 1910
Toward, James B.	Bankhead	2054	Mar. 12, 1912
Thomas, Emery R.	Carlstadt	1398	Apr. 25, 1910
Tessier, Geo. A.	Ena	1431	June 14, 1910
Toppin, Samuel S.	Calgary	1459	Aug. 15, 1910
Tupper, Roy O.	Kipp	1483	Sept. 1, 1910
Turner, Philip R.	Fort Saskatchewan ...	1518	Sept. 21, 1910
Thomas, Wm.	Bassano	2004	Nov. 24, 1912
Todd, Robt.	Strathcona	1562	Oct. 19, 1910
Tharp, Chancey L.	Taber	1572	Oct. 20, 1910
Tomfohr, Geo.	Milk River	1587	Nov. 17, 1910
Thompson, Henry	Castor	1677	Mar. 24, 1911
Tennis, Lloyd	Homeglen	1678	Mar. 24, 1911
Taylor, John W.	Lethbridge	1692	Mar. 29, 1911
Thoreson, Thos. L.	Holden	1700	Mar. 31, 1911
Tingley, Alex. B.	Blackfoot	1701	Mar. 31, 1911
Turnell, Reese W.	Three Hills	1728	Apr. 5, 1911
Towler, John W.	Sedgewick	1729	Apr. 5, 1911
Taylor, Frank S.	Carlstadt	1748	Apr. 10, 1911
Thillet, Claud	Calgary	1823	May 20, 1911
Thompson, And. J.	Lethbridge	1837	May 26, 1911
Thielen, Joseph	Milk River	1838	May 26, 1911
Toews, Peter L.	Stern	1904	Aug. 22, 1911
Tollestrup, Rudolph W.	Raymond	2420	Nov. 13, 1912
Trail, Herbert	Calgary	1996	Nov. 16, 1911
Thompson, Gordon B.	Strathcona	2011	Dec. 11, 1911
Thompson, Chas.	Red Deer	297	May 20, 1907
Thompson, Chas.	Red Deer	2337	July 17, 1912
Thompson, James	Innisfail	2034	Feb. 14, 1912
Thompson, Frank L.	Macleod	1271	Mar. 28, 1910
Thompson, Frank L.	Macleod	2085	Mar. 18, 1912
Thompson, Robson	Calgary	2027	Jan. 16, 1912
Teighton, Roy F.	Wetaskiwin	2050	Feb. 23, 1912
Tupper, Leon H.	St. Albert	2107	Mar. 28, 1912
Topper, George	Nanton	2113	Mar. 28, 1912
Taylor, Roy	Dolcy	2146	Apr. 10, 1912
Tubbs, Allie	Taber	2161	Apr. 19, 1912
Thomas, Alfred Ernest	Edmonton	2320	June 17, 1912
Taylor, Stead	Strathcona	2321	June 17, 1912
Thorp, Fred. Wm.	Calgary	2415	Nov. 12, 1912
Utter, Frank C.	Whitecourt	2051	Feb. 29, 1912
Underpool, Joseph W.	Calgary	2043	Feb. 14, 1912
Utas, Peter	Wetaskiwin	*331	Feb. 13, 1903
Umbach, Wm.	Spruce Grove	*357	May 13, 1903
Umbach, Jno. H.	Spruce Grove	67	Mar. 16, 1906
Urback, Albert F.	Calgary	258	Jan. 22, 1907
Umbach, Edgar A.	Spruce Grove	656	Apr. 22, 1908
Underwood, Harry A.	Emsbury	689	May 1, 1908
Ullman, Albert	Granum	842	Oct. 2, 1908
Vogel, Wilhelm	Strathcona	*22	Oct. 2, 1899
VanMeter, Chas. E.	Millet	*212	Dec. 13, 1901
Vanacker, Louis	St. Albert	*373	May 13, 1903
Vig, Oscar O.	Bentley	763	Mar. 24, 1905
Veeder, Robt. B.	Wetaskiwin	*791	Mar. 27, 1905
VanSellick, Jacob	Edmonton	32	Sept. 16, 1905
Van Wegan, Louis	Raymond	42	Sept. 18, 1905
Vogel, Ferdinand	Strathcona	2293	May 29, 1912
Vig, Casper O.	Bentley	110	Apr. 25, 1906

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Vaughan, Frank	Calgary	336	June 14, 1907
VanWinkle, Howard	High River	430	June 19, 1907
VanWinkle, Chester A.	High River	439	June 19, 1907
Venables, Wm.	Medicine Hat	482	Aug. 1, 1907
Veith, F. Wm.	Inga	490	Oct. 15, 1907
Vesseur, Moses	Sylvan Lake	1194	Feb. 21, 1910
Vlasak, Rudolph	Wessington	539	Oct. 28, 1907
Vandburgh, Jas. N.	Calgary	587	Mar. 23, 1907
Vanyel, Chas.	Edmonton	597	Apr. 2, 1908
Vanderford, Sylvester A.	Stettler	1297	Apr. 1, 1910
Vint, Francis	Stettler	1298	Apr. 1, 1910
Varembo, Olaf H.	Camrose	1546	Oct. 7, 1910
VanMeter, Jacob A.	Millet	823	Sept. 29, 1908
Valentine, Marcon F.	Bellevue	924	Mar. 30, 1909
Vaughn, Clifford E.	Wetaskiwin	1097	Sept. 7, 1909
VanKluck, Alerie	Reid Hill	1136	Sept. 21, 1909
Von Wald, Ernest C.	Stavely	1952	Sept. 9, 1911
Vincent, Robert W.	Coleman	2086	Mar. 18, 1912
Varty, Herbert H.	La Pearl	2147	Apr. 10, 1912
Van Der Doorn, Ant. E.	Medicine Hat	2190	Apr. 23, 1912
Van Der Velde, M.	Langdon	2214	Apr. 26, 1912
Witmer, Abram	Strathcona	*29	Oct. 9, 1899
Wilson, Jas.	Calgary	65	July 19, 1900
Wulff, Nick	Edmonton	1082	July 13, 1909
Walker, Robt.	Edmonton	*251	Aug. 18, 1902
Weder, Frank	Beaver Hills	*462	Oct. 28, 1903
Wells, Chas.	Rosenroll	*517	Apr. 18, 1904
Wardrop, Jno. L.	East Clover Bar	*640	Oct. 15, 1904
Will, Louis	Bankhead	*682	Jan. 3, 1905
Wilkinson, Richard	Olds	*754	Mar. 24, 1905
Whitcotton, Robt. M.	Lacombe	164	July 14, 1906
Wilson, Wm. Jos.	Coleman	9	Sept. 16, 1905
Wallace, W. J.	Macleod	12	Sept. 16, 1905
Wood, Wm. F.	Tofield	44	Sept. 18, 1905
Whalen, Jas.	Edmonton	69	Mar. 1, 1906
Wetterbeig, Theo.	Canmore	100	Apr. 20, 1906
Watts, Sam	Lacombe	103	Apr. 24, 1906
Werner, Wm. Fred	Red Deer	108	Apr. 24, 1906
Waymark, Richard T.	Calgary	123	Apr. 30, 1906
Whitaker, Wm.	Edmonton	129	May 4, 1906
Walker, Robt. T.	Strathcona	134	May 10, 1906
Wisler, Oliver P.	Stettler	136	May 10, 1906
Webber, Alfred	Medicine Hat	2141	Apr. 23, 1912
Wickens, J. A.	Cayley	199	Aug. 13, 1906
Wright, Bruce M.	Calgary	205	July 30, 1906
Watters, Wm. E.	Strathcona	277	Sept. 20, 1906
Wynn, Robt.	Kneehill Valley	291	May 20, 1907
Wood, Rex. R.	Carstairs	309	May 29, 1907
Wacker, Grover	Rawdonville	322	May 29, 1907
Webster, Robt. J.	Marwayne	390	June 14, 1907
Walkermeyer, Wm.	Heatherbrae	396	June 14, 1907
Wilcox, Isaac A.	High River	423	June 19, 1907
Wilson, Archibald	Brant	1465	Aug. 10, 1910
Wilderman, Raymond A.	High River	437	June 19, 1907
Walters, Wm.	Claresholm	864	Oct. 24, 1908
Wilcocks, Wm.	Lethbridge	475	July 15, 1908
Watson, Walter J.	Claresholm	578	Mar. 23, 1908
White, Jack	Calgary	585	Mar. 23, 1908
Wright, Merit E.	Edmonton	593	Apr. 2, 1908

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
White, Geo. T.	Red Deer	639	Apr. 14, 1908
Williams, Frank T.	Crossfield	682	May 1, 1908
Winkleman, Jules	Leduc	711	May 18, 1908
Wilbert, Chas.	Wetaskiwin	721	May 28, 1908
Walker, Preston	Lacombe	772	Sept. 14, 1908
Watson, P.	Edmonton	781	Sept. 18, 1908
Wentworth, Wm.	Okotoks	806	Sept. 22, 1908
Wilson, Bert M.	Nanton	843	Oct. 2, 1908
Wright, Leroy H.	Cardston	859	Oct. 6, 1908
Wilson, Chas. O.	Spring Coulee	803	Oct. 21, 1908
Wallwork, Jas.	Taber	903	Mar. 24, 1909
Webster, Alexr.	Pincher Creek	933	Apr. 1, 1909
Weber, Noah R.	Carstairs	950	Apr. 6, 1909
Watts, Geo.	Macleod	957	Apr. 9, 1909
Wilson, Andrew W.	Vegreville	985	Apr. 20, 1909
Walker, Edgar N.	Mundare	986	Apr. 20, 1909
Wilson, Jos. W.	Edmonton	987	Apr. 20, 1909
Wyman, Clark I.	Magrath	1007	Apr. 25, 1909
Walker, Chas. H.	Warner	1008	Apr. 25, 1909
Williams, Edgar H.	Bankhead	1034	Apr. 28, 1909
Woodcock, Frank F.	Medicine Hat	1155	Sept. 28, 1900
Wiltzen, Martin	Chipman	1043	Apr. 28, 1909
White, Edward	Lethbridge	1056	May 3, 1909
Winter, Archibald	Strathcona	1072	May 21, 1909
Weisser, Christian B.	Camrose	1094	Sept. 7, 1909
West, Wm. A.	Mewassin	1099	Sept. 13, 1909
White, Thos. J.	Stirling	1108	Sept. 15, 1909
Wick, Anton	Lineham	1137	Sept. 21, 1909
Wilson, Aura L.	Carstairs	1138	Sept. 21, 1909
Wood, Roy J.	Carstairs	1139	Sept. 21, 1909
Wolanskey, John	Edmonton	1149	Sept. 25, 1909
Wonnop, Jos. L.	Lawrence	1156	Sept. 28, 1909
Watt, Geo.	Strathcona	1184	Dec. 4, 1909
White, Chris., Jr.	Red Deer	1201	Mar. 3, 1910
Williams, Albert	Magrath	1245	Mar. 15, 1910
Wilson, Clifford	Camrose	1299	Apr. 1, 1910
Watson, Fredk.	Bankhead	2441	Dec. 18, 1912
Watson, Robt.	Edgerton	1352	Apr. 13, 1910
Wilson, Rufus B.	Tofield	1354	Apr. 13, 1910
Woods, Henry	Warner	1365	Apr. 14, 1910
White, Jas. Albert	Lethbridge	1366	Apr. 14, 1910
Wilson, Robt.	Medicine Hat	1399	Apr. 25, 1910
Wooley, Norman	Medicine Hat	1759	Apr. 15, 1911
Whitehead, Martin	Banff	1432	June 14, 1910
Woods, Harry	Lethbridge	1439	July 8, 1910
White, John W.	Brooks	1452	July 15, 1910
Walker, John A.	Warren	1490	Sept. 7, 1910
Wagner, A. C. L.	Calgary	1529	Sept. 23, 1910
Wilson, John L.	Bassano	1530	Sept. 23, 1910
Wilson, Wm. John	Angus Ridge	1547	Oct. 7, 1910
Wocknitz, Paul	Magrath	1573	Oct. 20, 1910
Wessenger, Ray	Medicine Hat	1574	Oct. 20, 1910
		1749	Apr. 12, 1911
Wolfe, John W.	Edmonton	1538	Nov. 21, 1910
Williams, Chas. A.	Calgary	1595	Dec. 15, 1910
Williams, Alfred L.	Calgary	1596	Dec. 15, 1910
Weston, Thomas W.	Hillcrest	2118	Apr. 1, 1912
Watson, Wilfred G.	Calgary	1663	Mar. 20, 1911
Wallace, Richard R.	Lloydminster	1669	Mar. 22, 1911
White, Wm. R.	Castor	2089	Mar. 21, 1912

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Wight, H. E.	Cardston	1683	Mar. 28, 1911
Wright, Oscar H.	Warner	1693	Mar. 29, 1911
Wagar, Elmore C.	Bow Island	1710	Mar. 31, 1911
Wagar, George	Bow Island	1711	Mar. 31, 1911
Wilson, Charles B.	Olds	1730	Apr. 5, 1911
Wood, Thomas W. G.	Lethbridge	1794	Apr. 24, 1911
Weeks, George S.	Seven Persons	1795	Apr. 24, 1911
Woods, George	New Dayton	1842	Apr. 26, 1911
Woodrow, Duncan	Edmonton	1847	June 9, 1911
Wilbraham, George	Edmonton	1873	July 12, 1911
Williams, Thomas	Grand Prairie	1884	July 19, 1911
Wilson, Ernest	Langdon	1885	July 19, 1911
Walker, Jas H.	Gleichen	1905	Aug. 22, 1911
Wonson, Louis A.	Calgary	1940	Sept. 8, 1911
Wagar, Arnold	Millet	1958	Sept. 9, 1911
Wilson, Oscar L.	High River	1971	Oct. 20, 1911
Welsh, John	Vermilion	2012	Dec. 12, 1911
Williams, Ross D.	Winnifred	2017	Dec. 19, 1911
Wertz, Ran. W.	Lethbridge	2018	Dec. 19, 1911
Whalls, George	Calgary	2020	Dec. 23, 1911
Wharron, Frank T.	Calgary	1213	Apr. 7, 1910
Wharron, Frank T.	Calgary	2162	Apr. 19, 1912
Williams, Wm. D.	Vermilion	1508	Sept. 21, 1910
Williams, Wm. D.	Vermilion	2232	Apr. 29, 1912
Wallace, F. M.	Lethbridge	1878	July 13, 1911
Wallace, F. M.	Lethbridge	2067	Mar. 13, 1912
Wilson, Steven E.	Calgary	2044	Feb. 14, 1912
Wentz, Earl R.	Medicine Hat	2068	Mar. 13, 1912
Wark, Fred D.	Gladys	2114	Mar. 28, 1912
Whitehouse, Jas. E.	Strathmore	2135	Apr. 4, 1912
Willits, John T.	Clover Bar	2219	Apr. 29, 1912
Weber, Edwin	Didsbury	2261	May 3, 1912
Wesenberg, William	Ghost Pine Creek	2262	May 3, 1912
Wheatley, Edward A.	Leslieville	2265	May 15, 1912
Williams, John	Lille	2269	May 18, 1912
Watson, Isaac M.	Lethbridge	2270	May 18, 1912
Winters, Arthur J.	Bassano	2284	May 22, 1912
Wimer, William	Ferintosh	2295	May 29, 1912
Wilcox, Edward	Camrose	2298	June 10, 1912
Wilson, Aaron	Calgary	2304	June 11, 1912
Walker, Alex.	Calgary	2322	June 21, 1912
White, William L.	Edmonton	2336	July 16, 1912
Ward, William	Calgary	2349	July 18, 1912
Walker, John F.	Bassano	2350	July 18, 1912
Wright, Frank G.	Staffordville	2356	July 19, 1912
Ward, Walter Geo.	Lethbridge	2362	Aug. 14, 1912
Wismer, Henry F.	Nanton	2402	Oct. 19, 1912
Wyatt, Sidney	Calgary	2407	Oct. 19, 1912
Wright, Joseph	Calgary	2408	Oct. 19, 1912
Young, Arthur	Banff	*491	Mar. 14, 1904
Young, D. M.	Lethbridge	4	Sept. 16, 1905
Yeamans, Chas. A.	Edmonton	2294	May 29, 1912
Young, Jno. T.	Stavely	465	July 15, 1907
Young, Alvia L.	Markerville	643	Apr. 14, 1908
Young, David	Strathcona	2226	Sept. 29, 1912
Young, Peter	Calgary	959	Apr. 9, 1909
Young, Jas.	Edmonton	1355	Apr. 13, 1910
Young, Jas.	Gleichen	1531	Apr. 23, 1910
Yeomans, George M.	Brocket	1634	Mar. 15, 1911

*Indicates Certificate was granted by North-West Territories.

SCHEDULE OF HOLDERS of Final Certificates of Qualification under
The Steam Boilers Act.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Third Class—Continued			
Zimmerman, Arthur C.	Bawlf	1548	Oct. 7, 1910
Zuehlke, F. C.	Urquhart	*188	Dec. 18, 1901
Zimmerman, Otto	Red Lodge	*756	Mar. 24, 1905
Zachowski, John	Edison	1150	Sept. 25, 1909
Zille, Frank	Lille	2087	Mar. 18, 1912
Zorves, Andrew J.	Blairmore	2088	Mar. 18, 1912

*Indicates Certificate was granted by North-West Territories.

DEPARTMENT OF PUBLIC WORKS
TRACTION ENGINEERS' Final Certificates.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Arrison, Norman W.	Gleichen	73	Aug. 16, 1912
Andrews, John	Stewartwayn	1	May 13, 1912
Adler, Lee	Stirling	32	June 14, 1912
Arndt, Paul	Whitla	83	Sept. 17, 1912
Atkinson, Henry	Medicine Hat	84	Sept. 17, 1912
Blatchford, Arthur L.	Olds	56	July 30, 1912
Benning, Alonso	Lethbridge	26	June 5, 1912
Bassett, Chas. C.	Cora Lynn	27	June 10, 1912
Burger, Samuel M.	Bentley	28	June 10, 1912
Bobier, Louis	Coaldale	65	Aug. 14, 1912
Brown, Frank	Spring Coulee	85	Sept. 17, 1912
Buchanan, Robt. Jas.	Welling	86	Sept. 17, 1912
Boyce, Samuel L.	Calgary	107	Sept. 19, 1912
Beebe, Roy A.	Cowley	122	Oct. 17, 1912
Bowman, Harry H.	High River	126	Oct. 19, 1912
Baker, Edwin E.	Glenview	127	Oct. 19, 1912
Blegan, John P.	Crossfield	131	Oct. 19, 1912
Cale, Arthur Wm.	Lethbridge	82	Sept. 9, 1912
Choate, Stewart	Trochu	2	May 13, 1912
Curtis, Albert G.	Cora Lynn	3	May 13, 1912
Cook, Manny. A.	Calgary	17	May 22, 1912
Cathcart, James	Edmonton	38	June 17, 1912
Christensen, Jacob	Standard	48	July 18, 1912
Coutts, Alex.	Warner	53	July 19, 1912
Church, Herbert Geo.	Winnifred	66	Aug. 14, 1912
Coldsnow, Alvah	Coutts	87	Sept. 17, 1912
Clark, Charles	Calgary	106	Sept. 19, 1912
Caskey, Oran A.	Caskey	115	Sept. 27, 1912
Shaffin, John D.	Arrowood	129	Oct. 19, 1912
Chippenden, Henry L.	Bassano	138	Dec. 18, 1912
Donnelly, Walter S.	Bow Island	33	June 14, 1912
Dimmer, Matt	Coaldale	67	Aug. 14, 1912
Dopp, Barnett	Seven Persons	88	Sept. 17, 1912
Danielson, Daniel T.	St. Kilda	89	Sept. 17, 1912
Derby, Bernie E.	Ft Saskatchewan	111	Sept. 20, 1912
Dalquist, August	Calmar	133	Nov. 8, 1912
Eggenberger, Emil W.	Coalbanks	4	May 13, 1912
Engle, Ralph N.	Bassano	31	June 11, 1912
Elliott, Walter E.	Calgary	130	Oct. 19, 1912
Fyrk, Gust.	Pendant D'Orilla	12	May 18, 1912
Firth, Wilfred	Lethbridge	123	Oct. 17, 1912
Frederickson, D. O.	Calgary	134	Nov. 8, 1912
Green, John Hy.	Staunton	68	Aug. 14, 1912
Gray, Joseph O.	Grassy Lake	13	May 18, 1912
Grubert, Henry	Leduc	57	Aug. 12, 1912
Gow, Archibald	Athabasca Landing	40	June 28, 1912
Gilchrist, Lee	Hill Springs	90	Sept. 17, 1912
Graham, Fred O.	Clareholm	91	Sept. 17, 1912
Harwood, Gordon W.	Stettler	5	May 13, 1912
Hesse, William	Calgary	18	May 22, 1912
Hewer, Eber J.	Hairy Hill	58	Aug. 12, 1912
Haley, Edward Geo.	Wheat Centre	74	Aug. 20, 1912
Hantsman, Lewis J.	Carmangay	92	Sept. 17, 1912
Hall, William J.	Calgary	105	Sept. 19, 1912
Harmer, Edward	Edmonton	116	Sept. 27, 1912
Henderson, Harry	Okotoks	128	Oct. 19, 1912
Iverson, Louis O.	Bismarck	29	June 10, 1912

TRACTION ENGINEERS' Final Certificates.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Jerome, Earl	Noble	14	May 18, 1912
Johnson, John G.	Suffield	19	May 22, 1912
Johnson, Aug. K.	Strathcona	25	May 29, 1912
Jackson, Lionel A.	Calgary	75	Aug 20, 1912
Jamieson, Harry W.	Nanton	76	Aug. 20, 1912
Johannsen, Hy. G.	Bergen	113	Sept. 21, 1912
Johnston, Albert E.	Edmonton	117	Sept. 27, 1912
Johnson, Oscar F.	Strathmore	139	Dec. 18, 1912
Klaparezuk, Stephen	Mundare	121	Oct. 14, 1912
Krodel, John A.	Irvine	55	July 23, 1912
Koester, Clarence G.	Lost Lake	69	Aug. 14, 1912
Kelly, Robert	Calgary	77	Aug. 20, 1912
Kuhl, Edward	Calgary	20	May 22, 1912
Loomer, Charles S.	Endiang	6	May 13, 1912
Langer, Paul	Eckville	30	June 10, 1912
Lyon, Jay	Clareholm	35	June 14, 1912
Latta, Charles W.	Tofield	39	June 17, 1912
Lawin, Frank E.	Pine Creek	59	Aug. 12, 1912
Lawler, Joseph W.	Lethbridge	70	Aug. 14, 1912
Lefebvre, Adelard J.	Irvine	72	Aug. 14, 1912
Litke, Steve	Gleichen	78	Aug. 20, 1912
Lynn, John W.	Crossfield	101	Sept. 19, 1912
Lerbeckmo, Peter	Bardo	112	Sept. 20, 1912
Magill, Otis D.	Calgary	79	Aug. 20, 1912
Matti, Adolf	MacLeod	93	Sept. 17, 1912
Maki, Gust.	Sylvan Lake	135	Nov. 12, 1912
Mullane, Chris. D.	Lethbridge	137	Dec. 17, 1912
McCoy, Martin H.	Coaldale	15	May 18, 1912
McGhan, Lloyd Jas.	Clover Bar	60	Aug. 12, 1912
McNab, Duncan	Kipp	96	Sept. 17, 1912
McDowell, Grant S.	Vulcan	124	Oct. 17, 1912
Nelson, Ernest W.	Calgary	125	Oct. 19, 1912
Nemsgern, Nicholas	Clareholm	94	Sept. 17, 1912
Norris, Roy James	Lethbridge	95	Dec. 17, 1912
Ogden, Herman E.	Pincher City	34	June 14, 1912
Olson, Oscar T.	Hutton	49	July 18, 1912
Perin, Charles A.	Calgary	50	July 18, 1912
Pearson, Vernon	Lethbridge	54	July 19, 1912
Pennington, Wm.	Lethbridge	136	Nov. 13, 1912
Robertson, Donald	Medicine Hat	36	June 14, 1912
Rowlands, Hugh G.	Delroys	51	July 18, 1912
Rennie, James C.	Yetwood	71	Aug. 14, 1912
Rhoads, George	Calgary	80	Aug. 20, 1912
Rickey, Foster	Lethbridge	97	Sept. 17, 1912
Smith, Rowland	Castleyville	7	May 13, 1912
Scheerschmidt, Bernhardt ..	Stettler	8	May 13, 1912
Smith, Manley	Olds	11	May 15, 1912
Scott, William J.	Bassano	21	May 22, 1912
Stauffer, John L.	Round Hill	24	May 29, 1912
Scott, Allan O.	Kinsella	42	July 16, 1912
Stott, John J.	Hardisty	43	July 16, 1912
Sidet, Elmer	Jethson	52	July 18, 1912
Sandstrom, Axel	Calmar	61	Aug. 12, 1912
Schultz, Fred H.	Bruderheim	62	Aug. 12, 1912
Samue'son, Lorantz	Cummings	63	Aug. 12, 1912
Stewart, William J.	Hughenden	81	Aug. 22, 1912

TRACTION ENGINEERS' Final Certificates.—*Continued.*

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Straus, Fred J.	Stavely	98	Sept. 17, 1912
Scott, Robert T.	Cayley	108	Sept. 19, 1912
Stevenson, Ivie W.	Calgary	109	Sept. 19, 1912
Stewart, Martin O.	Calgary	110	Sept. 19, 1912
Smith, Aug. W. De'H.	Paddle River	114	Sept. 20, 1912
Snell, Edward	Bittern Lake	18	Sept. 27, 1912
Scheideman, John	Mewassin	120	Oct. 10, 1912
Tellesen, Alex.	Ingleton	9	May 13, 1912
Tupper, Roy O.	Entwistle	23	May 29, 1912
Thordarson, Chris.	Clover Bar	44	July 16, 1912
Thompson, Charles	Bow Island	99	Sept. 17, 1912
Underwood, Elmer A.	Gadsby	10	May 13, 1912
Utas, Chas.	Manfred	132	Nov. 7, 1912
Utas, Christian	Water Glen	64	Aug. 14, 1912
Valcour, Alga.	Riviere Qui Barre	45	July 16, 1902
Van Horn, William	Gleichen	103	Sept. 19, 1912
Willson, William	Many Berries	16	May 18, 1912
Watters, Chas. A.	Calgary	22	May 22, 1912
Weatherhead, Marsden	Lethbridge	37	June 14, 1912
Ward, Luman G.	Athabasca Landing ..	41	June 28, 1912
Whitney, John E.	Iola	47	July 17, 1912
Williamson, Charles W.	Claresholm	100	Sept. 17, 1912
Wismer, Henry F.	Nanton	102	Sept. 19, 1912
Wells, Edwin Newton	Cluny	104	Sept. 19, 1912
Wiltzen, Norman	Chipman	119	Sept. 27, 1912

FIREMEN'S Final Certificates.

NAME	ADDRESS	NO. OF CERT.	DATE OF ISSUE
Lee, Elling	Calgary	3	Sept. 19, 1912
Miller, John B.	Calgary	1	June 21, 1912
McCartney, Grant	Edmonton	4	Oct. 8, 1912
Willis, Percy W.	Calgary	2	June 21, 1912

EDMONTON, January 13, 1913.

REPORT OF CORRESPONDENCE BRANCH FOR YEAR 1912

With reference to the work of this branch for the year the following statement will give a fair idea.

In view of the fact that prior to 1912 this department included the municipal or local improvement and telephone branches, but, now being separate departments a fair comparison with past years cannot be made:

Number of letters received	51,774
Number of letters mailed	51,426
Total number of communications	<u>103,200</u>

Number of cash items received	2,546
Amount of cash received	\$166,000.05
Number of registered letters received	1,678
Number of registered letters mailed	7,297
Amount of postage used	\$1,411.25
Number of new files made and indexed	1,787

EDMONTON, January 17th, 1913.

JOHN STOCKS, ESQ.,
Deputy Minister of Public Works,
 Edmonton, Alta.

SIR,—As accountant of the Department of Public Works, I have the honour to submit herewith my annual report for the year ending December 31st, 1912.

During the year 1912 the work of this branch has been largely increased, the expenditure being about one-third heavier than in 1911, while the receipts of revenue of the department have increased three-fold. Below you will find reported in detail the work of the department for the year.

Amount provided for Capital Account Expenditure during 1912	\$2,367,058.20	
Amount provided for expenditure chargeable to income	450,000.00	
Amount provided for expenditure under special warrants	98,800.00	
		\$2,915,858.20
Amount provided for civil government expenditure		56,080.00
Total amount provided in connection with the Department of Public Works for the year 1912....		2,971,938.20
Monies collected during 1912 on account of Public Works Department, as detailed below and placed to the credit of General Revenue—		
Steam Boilers Branch	18,719.70	
Coal Mines Branch	3,030.00	
Surveys Branch:		
Grazing leases.....\$	372.00	
Approval and final fees in connection with town site plans	91,273.50	
Sundries	1,413.29	
	93,058.79	
Monies received on account of sales of material, refunds, etc.	73,538.32	188,346.81
Monies collected by Public Works and placed to the credit of general revenue suspense account...	93,179.02	
Monies on hand in general revenue suspense account December 31st, 1912, as represented by cash book balance		30,389.35
Amount received from L.L.I. Districts and placed to the credit of trust account "A".....		115,210.47
Amount expended for work and cost of administration of trust account "A"		156,513.06
Credit Bank Balance on trust account "A" from 1911		58,334.32
Amount expended from general revenue during 1912.		
Income	481,165.79	
Capital	2,217,441.47	
Warrants	23,302.50	
		2,721,909.76
Amount expended in connection with civil government during 1912		51,877.38
Receipts	392,280.95	
Expenditure	2,930,300.20	
	\$3,322,581.15	\$3,322,581.15

Details of expenditure from all sources for the year are as follows:

Furnishing and maintenance of public buildings, \$131,951.36. Caretaking and maintenance of government house, \$4,340.63. Completing and furnishing new buildings throughout the province during the

year amounted to \$904,720.90. Inspection of public works in connection with the smaller works cost \$9,495.12, while the inspection of trunk roads and trunk bridges with the larger wooden bridges in the various constituencies amounted to \$9,099.04. Inspection of coal mines in connection with operation cost \$16,229.10, and the installation and equipment of the two rescue stations in connection with coal mines cost \$9,552.43. The administration of the steam boilers branch, inspections and examinations cost \$25,820.57. The installation of ferries and operation and upkeep for the year amounted to \$36,205.39. The provincial drainage schemes cost \$10,866.29. Repairs to bridges cost \$31,257.23. Construction of the smaller roads cost \$210,601.82. The construction of trunk roads and the bridges in connection with them amount to \$895,441.35. Wooden bridges throughout the province amounted to \$197,195.33. The cost of our surveyors and their parties in the field, with the amount paid for compensation for land procured for road allowances amounted to \$79,314.37, and the administration of this branch, including supervision of plans and the ordinary office expenses amounted to \$7,116.81. Furniture purchased for the parliament buildings cost \$12,501.56. The cost of finishing material purchased and worked up in the carpenter shop for the various provincial buildings was \$12,592.57. The improvement of the grounds around the Wetaskiwin court house cost \$270.35. Accidents to workmen engaged on the various provincial works and for other unforeseen expenditure amounting to \$7,147.76. The Normal school site at Camrose cost \$16,800.00, and the amount expended in connection with the visit of the Duke of Connaught was \$6,502.50. This amount covers the cost of entertaining and dressing the public buildings at the various points throughout the province where His Royal Highness was entertained. The total amount expended upon staff salaries from civil government for the year was \$44,317.48. Postage used in the department amounted to \$1,090.00. Telegrams, telephone messages cost \$1,022.81. Sundry expenditures, including printing, cost \$5,447.09, making a total expenditure under civil government of \$51,877.38.

The total amount expended from local improvement trust account "A" amounted to \$156,513.06. Of this amount the sum of \$32,801.03 was paid for salaries to the staff of this department, but of this latter amount educational trust account, reimbursed this account to the extent of \$4,878.02 for clerical work and for postage supplies. This account also refunded \$900.00.

Number of accounts examined and passed to the treasury department for payment during the year	\$14,022
Number of accounts passed for payment in connection with local improvement trust account "A" for work	\$1,515
Total number of accounts passed for payment for the year..	\$15,537
 Number of cheques issued in connection with the payment of accounts L. I. districts during the year	 \$4,389
Number of cheques issued in connection with general revenue suspense account for the year	\$ 294
	\$4,683

Besides the above expenditure there was handled through this office part of the cost of construction in connection with the addition to the Central Telephone Exchange in Calgary. For this purpose the

telephone department advanced us \$12,000.00 and in disbursing this we checked and passed for payment 21 payrolls and issued 306 cheques. Below you will find a statement of this expenditure.

Amount of advance.....	\$12,000.00	Amount expended	\$ 9,294.69
Interest on same	107.00	Unexpended balance re-	
		turned	2,705.31
		Interest paid to telephone	
		department	107.00
	<u>\$12,107.00</u>		<u>\$12,107.00</u>

There was also paid to Messrs. Scott and Fraser, of Frank, by cheque No. 283 from General Revenue Suspense Account, the sum of \$1,870.85, covering the provincial government's proportion of cost of moving 35 houses belonging to Canadian Coal Consolidated, Limited, from the danger zone near Frank.

Respectfully submitted,

HENRY K. HYDE,

Accountant of Public Works.